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Minutes - DRAFT

Date: April 25, 2019
To: NCPA Commission
From: Cary A. Padgett, Assistant Secretary to the Commission
Subject: NCPA Commission Meeting

1 – Call Meeting to Order and Introductions

Chair Roger Frith called the meeting to order at 9:44 am at NCPA's Office, 651 Commerce Drive, Roseville California. A quorum was present. Introductions were made. Those in attendance are shown on the attached attendance list.

2 – Approve Minutes of the March 28, 2019, Regular Commission Meeting

Motion: A motion was made by Greg Scharff and seconded by John Allard to approve the Minutes of the March 28, 2019, Regular Commission Meeting. The motion carried unanimously on a voice vote of those Members present.

San Francisco BART, Gridley, Lompoc, and Truckee Donner were absent.

PUBLIC FORUM

No comments from the public.

REPORTS AND COMMITTEE UPDATES

3 – General Manager's Business Progress Report and Update

- Gave an update on NCPA's Support and Shared Services Agreements and provided a copy of the monthly status report.
- Provided an overview of CMUA's Annual Conference that was held in San Diego earlier in the month.
- Gave an update on Hometown Connections, Inc. (HCI): the HIC Board met on April 23 and received reports on the financial outlook for HCI, which is better than budgeted; discussed the IRS Letter Ruling status; and the status of the AMI program. Completed

the support services program with SCPPA for HCI members and currently working with CMUA as well.

- Met with the Western Area Power Administration Leadership on markets.
- Gave a report on the meeting with the Governor's office regarding the Wild Fire Report. NCPA did provide comments on the report, as well as additional information was provided. Discussed the fix for inverse condemnation rules, which is the highest priority.
- Thanked Assistant General Manager Ken Speer and Steve Hance from Santa Clara for their efforts on the PG&E Gas Tariff case.

4 – Executive Committee

Committee Chair Frith reported the Committee met once since the last Commission meeting. The Committee heard reports from the General Manager and General Counsel, discussed the Proposed Member Business Travel and Related Expenditures Policy, and discussed items in closed session. No reportable action was taken on the closed session items.

5 – Facilities Committee

Assistant General Manager Tony Zimmer reported the Committee met once since the last Commission meeting. The Committee met and discussed items 14-20 on the agenda. The Committee did establish a quorum, and recommended Commission approval of all items.

6 – Finance Committee

Committee Chair David Hagele reported the Committee did not meet since the last Commission meeting. However, the Committee met in February and discussed Item 22 on the agenda (Approve the Termination of the 2008 Series B Hydroelectric Interest Rate Swap). The Committee recommended Commission approval. The next regular meeting will be held on May 7th.

7 – Legal Committee

General Counsel Jane Luckhardt reported that the Committee did not meet since the last Commission meeting.

8 – Legislative & Regulatory Affairs Committee

Committee Chair Mark Chandler reported the Committee did meet once since the last Commission meeting. The Committee heard reports on the State Wildfire Policy, the Federal Power Resources Issues, State Legislative issues, and External Affairs related to the West Coast Clean Transit Initiative. The Committee was briefed on key federal and regulatory issues in preparation for the upcoming Federal Policy Conference being held in Washington, D.C. the following week.

The 2019 State Legislative Staff Tour is scheduled for July 29-31. This year the tour will visit Redding, Plumas-Sierra and Truckee Donner. The next Committee meeting is scheduled on August 28, 2019, at NCPA's office in Roseville.

9 – Members’ Announcements & Meeting Reporting

Roger Frith, **Biggs**, reported the City replaced its antiquated financial system, which is the first step in moving to AMI. The City plans to have the program running by the end of the year.

CONSENT CALENDAR

Prior to the roll call vote to approve the Consent Calendar, the Commissioners were polled to determine if any member wished to pull an item or abstain from one or more items on the Consent Calendar.

No items were pulled from the Consent Calendar for discussion.

Motion: A motion was made by John Allard and seconded by Greg Scharff to approve the Consent Calendar consisting of Items 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20. The motion carried by a majority of those members present on a roll call vote with the abstentions noted below for each item.

San Francisco BART, Gridley, Lompoc, and Truckee Donner were absent.

10. NCPA’s Financials for the Month Ended March 31, 2019 – approval by all Members.

11. Treasurer’s Report for the Month Ended March 31, 2019 – accept by all Members.

12. Sale or Disposal of Surplus – note and file report by all members for the disposal of scrap metal and e-waste that was disposed of via recycling establishments.

Fiscal Impact: This report has no direct fiscal impact to the Agency.

13. Proposed Amendment to the 2019 Committee Meeting Calendar – consideration by all members to approve the proposed Amended 2019 Committee Meeting Calendar. The only proposed amendment moves the regular scheduled July 25 Executive Committee and Commission meetings to July 26, due to an external location conflict at Murphys.

Fiscal Impact: This report has no direct fiscal impact on the Agency.

14. Resolution 19-30, Trimark Associates, Inc. – Five Year Multi-Task General Services Agreement for revenue meter related (installation, maintenance, data acquisition, telemetry, etc.) services. Applicable to the following projects: All NCPA Facility Locations, Members, SCPPA, and SCPPA Members – adopt resolution by all members authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Trimark Associates, Inc., for revenue meter related services, including any non-substantial changes recommended and approved by the NCPA General Counsel.

Fiscal Impact: Upon execution, the total cost of the agreement is not to exceed \$2,000,000.00 to be used out of the NCPA approved budget.

15. Resolution 19-31, Pacific Power Engineers, Inc. – Five Year Multi-Task General Services Agreement for revenue meter related (installation, maintenance, data acquisition, telemetry, etc.) services. Applicable to the following projects: All NCPA Facility Locations, Members, SCPPA, and SCPPA Members – adopt resolution by all members authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Pacific Power Engineers, Inc., for revenue meter related services, including any non-substantial changes recommended and approved by the NCPA General Counsel.

Fiscal Impact: Upon execution, the total cost of the agreement is not to exceed \$2,000,000.00 to be used out of the NCPA approved budget.

16. Resolution 19-32, Approval of Letter of Agreement 19-SNR-02239 – adopt resolution by all members approving the Western Area Power Administration Letter of Agreement 19-SNR-02239, and authorize the General Manager of NCPA to execute Letter of Agreement 19-SNR-02239, on behalf of NCPA, including any non-substantive modifications to Letter of Agreement 19-SNR-02239 approved by NCPA's General Counsel.

Fiscal Impact: Costs associated with entering into Letter of Agreement 19-SNR-02239 are estimated to be less than \$10,000 for the term of the agreement, and will be allocated according to Base Resource percentages of the represented members. NCPA's administrative costs for development and administration of the agreement will be allocated to members in accordance with approved cost allocation methodologies as described in the NCPA annual budget.

Redding, Santa Clara and Shasta Lake abstained.

17. Resolution 19-35, GEI Consultants, Inc. – Five Year Multi-Task Professional Services Agreement for engineering services; Applicable to the following projects: All NCPA Facility Locations, Members, SCPPA and SCPPA Members – adopt resolution by all members authorizing the General Manager or his designee to enter into a Multi-Task Professional Services Agreement with GEI Consultants, Inc., for engineering services, with any non-substantial changes recommended and approved by the NCPA General Counsel.

Fiscal Impact: Upon execution, the total cost of the agreement is not-to-exceed \$1,000,000 over five years to be used out of NCPA approved budgets as services are rendered.

18. Resolution 19-36, Johnson Controls, Inc. – Five Year Multi-Task General Services Agreement for HVAC and chiller maintenance related services; Applicable to the following projects: All NCPA Facility Locations, Members, SCPPA, and SCPPA Members – adopt resolution by all members authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Johnson Controls, Inc., for HVAC and chiller maintenance related services, with any non-substantial changes recommended and approved by the NCPA General Counsel.

Fiscal Impact: Upon execution, the total cost of the agreement is not to exceed \$500,000.00 over five years, to be used out of the NCPA approved budget.

19. Resolution 19-37, WorleyParsons Group, Inc. – Five Year Multi-Task Professional Services Agreement for project support services; Applicable to the following projects: All NCPA Facility Locations, Members, SCPPA, and SCPPA Members – adopt resolution by all members authorizing the General Manager or his designee to enter into a Multi-Task Professional Services Agreement with WorleyParsons Group, Inc., for project support services related to plant operations, with any non-substantial changes recommended and approved by the NCPA General Counsel.

Fiscal Impact: Upon execution, the total cost of the agreement is not to exceed \$1,500,000.00 over five years, to be used out of the NCPA approved budget.

20. Resolution 19-38, American Power Systems, LLC – Five Year Multi-Task General Services Agreement for battery related services; Applicable to the following projects: All NCPA Facility Locations, Members, SCPPA, and SCPPA Members – adopt resolution by all members authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with American Power Systems, LLC for battery related services, with any non-substantial changes recommended and approved by the NCPA General Counsel.

Fiscal Impact: Upon execution, the total cost of the agreement is not to exceed \$500,000.00 over five years, to be used out of the NCPA approved budget.

DISCUSSION / ACTION ITEMS

21. Resolution 19-33, Approval of Exhibit C, Revision 23 to Western Area Power Administration (WAPA) Contract 96-SNR-00110 – adopt resolution by all members approving Exhibit C, Revision 23 to Contract 96-SNR-00110, and authorize the General Manager of NCPA to execute Exhibit C, Revision 23 to Contract 96-SNR-00110, on behalf of NCPA, including any non-substantive modifications to Exhibit C, Revision 23 to Contract 96-SNR-00110 approved by NCPA's General Counsel.

Fiscal Impact: Execution of Exhibit C, Revision 23 to Contract 96-SNR-00110 would establish a commitment by NCPA, specifically the Assigning Members, to provide funds associated with federal Fiscal Year 2023 in the amount of \$10,931,542.95. The obligation to provide funds survives termination of the O&M Agreement, but any and all future obligations would be absolved coincident with the termination of the Base Resource contract.

WAPA will invoice and collect funds according to a monthly schedule. Approximately one (1) month following payment, WAPA will return funds to NCPA through a bill credit on the monthly WAPA power bill. Therefore, the net fiscal impact is approximately zero dollars (\$0.00). Costs associated with this commitment will be allocated to the Assigning Members based on Western Allocation percentages.

This item did not have a unanimous attendance of the Pool Members present at the Commission meeting. This item will be tabled for the May Commission meeting or a Special Commission meeting may be noticed, if necessary.

22. Resolution 19-34, Approve the Termination of the 2008 Series B Hydroelectric Interest Rate Swap – adopt resolution by all members authorizing and approving the termination of an interest rate swap agreement relating to Hydroelectric Project Number One Revenue Bonds (2008 Series B bonds); and authorizing certain other related matters.

Fiscal Impact: As of March 31, 2019, the MTM of the 2008 B swap was positive by approximately \$155,000, but this amount will fluctuate as interest rates move up or down. With this action, the Hydro project participants should receive a payment from the swap counterparty (approx. \$165k) less any related expenses from legal and/or the Agency's financial and swap advisors. No additional funds or budget augmentation is necessary.

Assistant General Manager Monty Hanks provided a background of NCPA entering into two forward starting swaps in anticipation of refunding the 1998 Hydro bonds, and explained the 2008 A/B Hydroelectric transaction functions. The Finance Committee recommended Commission approve to replace the LOC on the 2008 A bond and call for redemption the 2008B bond.

Motion: A motion was made by Mark Chandler, and seconded by Mel Grandi to adopt resolution authorizing and approving the termination of an interest rate swap agreement relating to Hydroelectric Project Number One Revenue Bonds (2008 Series B bonds); and authorizing certain other related matters. Motion carried by majority on a roll call vote of those members present.

Port of Oakland, Redding and Shasta Lake abstained. San Francisco BART, Gridley, Lompoc, and Truckee Donner were absent.

INFORMATION ITEMS

23. Proposed Annual Budget Review for Fiscal Year 2020 – status report, budget preview and presentation for this year's preparation.

Assistant General Manager Monty Hanks gave a presentation outlining the budget process and timeline, what the proposed budget includes, major drivers of budget changes, baseline budget analysis, A&G cost comparison, salaries and benefits, and other operating expenses. The overall budget target is no more than 2.7% increase from previous year base budget. Estimated rollout of the budget is the beginning of May. Staff will seek Commission approval at the May Commission meeting.

Non-essential Members and NCPA staff left the meeting for Closed Session Items 24, 25 and 26 discussion.

CLOSED SESSION

24. Conference with Legal Counsel – Existing litigation pursuant to Government Code Section 54956.9(d)(1): Name of case: *Northern California Power Agency, City of Redding, City of Roseville, and City of Santa Clara v. the United States*, Court of Federal Claims No. 14-817C.

25. Conference with Legal Counsel – Initiation of litigation pursuant to Government Code Section 54956.9 paragraph (4) of subdivision (d): one potential case.

26. Conference with Legal Counsel – Initiation of litigation pursuant to Government Code Section 54956.9 paragraph (2) of subdivision (d): one potential case.

RECONVENED TO OPEN SESSION

All meeting attendees rejoined the meeting.

REPORT FROM CLOSED SESSION

Closed Session Disclosure: General Counsel Jane Luckhardt stated there was no reportable action taken on the Closed Session items.

NEW BUSINESS

No new business was discussed.

ADJOURNMENT

The April 25, 2019, Commission meeting was adjourned at 11:13 am.

Respectfully submitted,
//
ROGER FRITH

Prepared by,

CARY A. PADGETT

Commission Chair

Assistant Secretary to the Commission

Attachments



CONSENT CALENDAR

All items on the Consent Calendar are considered routine and will be approved without discussion by a single-roll call vote. Any Commissioner or member of the public may remove any item from the Consent Calendar. If an item is removed, it will be discussed separately following approval of the remainder of the Consent Calendar.

Prior to the roll call vote to approve the Consent Calendar, the Commissioners will be polled to determine if any Member wishes to abstain from one or more items on the Consent Calendar.

CONSENT CALENDAR ROLL-CALL APPROVAL

Commission Meeting Date: **April 25, 2019**

Consent Items Listed on the Agenda: # 10 to # 20

Consent Items Removed from the Agenda and Approved Separately:

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ROLL-CALL VOTE BY MEMBERS: ROLL IPS

Member	Item Numbers Abstained	Vote	Absent
Alameda		Y	
BART		Y	X
Biggs		Y	
Gridley		Y	X
Healdsburg		Y	
Lodi		Y	
Lompoc		Y	X
Palo Alto		Y	
Port of Oakland	16	Y	
Redding	16	Y	
Roseville		Y	
Santa Clara	16	Y	
Shasta Lake	16	Y	
Truckee Donner		Y	X
Ukiah		Y	
Plumas-Sierra		Y	

ATTEST:
 Cary A. Padgett
 Assistant Secretary to the Commission

**Northern California Power Agency
ROLL CALL VOTE**

Topic: *Resolution*

	<u>VOTE</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
Alameda	<i>Y</i>		
BART			<i>X</i>
Biggs	<i>Y</i>		
Gridley			<i>X</i>
Healdsburg	<i>Y</i>		
Lodi	<i>Y</i>		
Lompoc			<i>X</i>
Palo Alto	<i>Y</i>		
Plumas-Sierra	<i>Y</i>		
Port of Oakland		<i>X</i>	
Redding		<i>X</i>	
Roseville	<i>Y</i>		
Santa Clara	<i>Y</i>		
Shasta Lake		<i>X</i>	
Truckee Donner			<i>X</i>
Ukiah	<i>Y</i>		

Passed and adopted this 25th day of April 2019, by the above vote on roll call.

Roger Frith





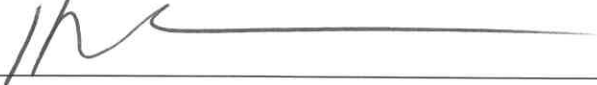




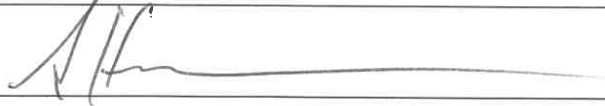


 ROGER FRITH
 Commission Chair

ATTEST: *Cary A. Padgett*

 CARY A. PADGETT
 Assistant Secretary

**Northern California Power Agency
Commission Meeting of April 25, 2019
COMMISSIONER
Attendance List**

NCPA Commissioners are requested to sign, but signature by members of the public is voluntary.

MEMBER	NAME
1 - ALAMEDA	
2 - BIGGS	
3 - GRIDLEY	
4 - HEALDSBURG	
5 - LODI	
6 - LOMPOC	
7 - PALO ALTO	
8 - PORT OF OAKLAND	
9 - PLUMAS-SIERRA REC	
10 - REDDING	
11 - ROSEVILLE	
12 - SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT	
13 - SANTA CLARA	
14 - SHASTA LAKE	
15 - TRUCKEE DONNER	
16 - UKIAH	

**Northern California Power Agency
Commission Meeting April 25, 2019
Attendance List**

NCPA Commissioners, Alternates & Staff are requested to sign, but signature by members of the public is voluntary.

NAME	AFFILIATION
Samuel Tolson	Steasta Lake
Melissa Price	Lodi
TERRY CRAWLEY	HEALDSBURG
David Harex	Healdsburg
Vidhi Chawla	Alameda
Monty Hanks	NCPA
Michael Brozo	Plumas - Sierra
STEVE HANCE	SANTA CLARA
Tony Zimmer	NCPA
Ken Speer	NCPA
Jane Cirincione	NCPA
Pauline Roccucci	Roseville
Michelle Bertolino	Roseville
Randy Howard	NCPA
Roger Firth	Biggs
Cary Padgett	NCPA
CHRISL BOTT	NCPA
Jane Luckhardt	NCPA



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Commission Staff Report

AGENDA ITEM NO.: **5**

Date: May 23, 2019
To: NCPA Commission
Subject: May 1, 2019 Facilities Committee Meeting Minutes

The attached Draft Minutes are being provided for information and to augment the oral Committee report.



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Minutes – Draft

Date: May 2, 2019
To: NCPA Facilities Committee
From: Carrie Pollo
Subject: May 1, 2019 Facilities Committee Meeting Minutes

- 1. Call meeting to order & Roll Call** - The meeting was called to order by Committee Chair Tikan Singh at 9:04 am. A sign-in sheet was passed around. Attending via teleconference and/or on-line presentation were Alan Harbottle (Alameda), Paul Eckert (Gridley), Shiva Swaminathan (Palo Alto), Brian Schinstock (Redding), and Paulo Apolinario and Steve Hance (Santa Clara). Those attending in person are listed on the attached Attendee Sign-in Sheet. Committee Representatives from BART, Biggs, Healdsburg, Plumas-Sierra, Port of Oakland, TID, and Ukiah were absent. A quorum of the Committee was established.

PUBLIC FORUM

No public comment.

- 2. Approve Minutes from the April 3, 2019 Facilities Committee Meeting.**

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending approval of the April 3, 2019 Facilities Committee meeting minutes. A vote was taken by roll call: YES = Alameda, Gridley, Lodi, Lompoc, Palo Alto, Redding, Roseville, and Santa Clara. The motion passed.

- 3. All Generation Services Facilities, Members, SCPPA – Mechanical Analysis Repair, Inc. dba Martech MTGSA** – Staff gave background information and was seeking a recommendation for Commission approval of a five-year Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech for machining services, with a not to exceed amount of \$1,500,000 for use at all facilities owned and/or operated by NCPA, its Members, SCPPA, and SCPPA Members. This is a renewal agreement with an existing vendor. It is an enabling agreement with no commitment of funds. All purchase orders issued pursuant to the agreement will be charged against approved Annual Operating Budgets. A draft Commission Staff Report and the draft agreement were available for review.

Motion: A motion was made by Jiayo Chiang and seconded by Brian Zard recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech for machining related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,500,000.00 over five years, for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public

Power Authority (“SCPPA”), or by SCPPA Members. A vote was taken by roll call: YES = Alameda, Gridley, Lodi, Lompoc, Palo Alto, Redding, Roseville, and Santa Clara. The motion passed.

- 4. All Generation Services Facilities, Members, SCPPA – KSB, Inc. MTGSA** – Staff provided background information and was seeking a recommendation for Commission approval of a five-year Multi-Task General Services Agreement with KSB, Inc. for pump related maintenance services, with a not to exceed amount of \$1,000,000, for use at all facilities owned and/or operated by NCPA, its Members, SCPPA, and SCPPA Members. This is a renewal agreement with an existing vendor. It is an enabling agreement with no commitment of funds. All purchase orders issued pursuant to the agreement will be charged against approved Annual Operating Budgets. A draft Commission Staff Report and the draft agreement were available for review.

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with KSB, Inc. for pump maintenance related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000.00 over five years, for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (“SCPPA”), or by SCPPA Members. A vote was taken by roll call: YES = Alameda, Gridley, Lodi, Lompoc, Palo Alto, Redding, Roseville, and Santa Clara. The motion passed.

- 5. NCPA Geothermal Facility – Steam Field Operations Forecast Report** – Staff reviewed the 2019 Steam Field Operations Forecast Report, and was seeking a recommendation for Commission approval of the report dated April 2019, including approval regarding the market power price at which to curtail the load at the NCPA Geothermal facilities, as the Geothermal Operating Protocol effective July 1, 2019, and remaining in effect until replaced by the Commission.

The 2018 net generation was slightly above the predicted 794.8 GWhs at 804.4 GWhs. The 2019 net generation is forecasted to be 716.9 GWhs with the FY2020 net generation forecasted at 731.9 GWhs. These two years are forecasted lower due to the planned unit overhauls and P-site well workovers.

The Geysers were cycled in the 1990’s, with some risk to the plant and steam field. The estimated break-even cost was \$19.07 per MWh. The 2019 Operating Protocol will be a two zone baseload operation unless specific financial incentives are met. Staff recommends these financial incentives to allow curtailment conditions including; negative Day Ahead pricing of at least \$25 per MWh, with the level of curtailment at 45 MW, and to be adjusted based on field response. The curtailment duration will be at least four hours or more, and limited to cycling once per day.

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending Commission approval of the 2019 Steam Field Operations and Forecast Report dated April 2019 as the Geothermal Operating Protocol effective July 1, 2019. This Operating Protocol is to remain in effect until replaced by the Commission. A vote was taken by roll call: YES = Alameda, Gridley, Lodi, Lompoc, Redding, Roseville, and Santa Clara. ABSTAIN = Palo Alto. The motion passed.

- 6. NCPA Generation Services Plant Updates** – NCPA Plant Staff provided the Committee with an informational update on current plant activities and conditions.

CTs – The CT1 U1 in Alameda has been very busy with 19 starts in April for a total FYTD of 217 starts. There were 0 starts for the CT2 this past month for a FYTD of 51 starts. There were

two forced outages at the CT1 U1, which included a delayed start/startup instruction, and a lube oil ruptured disk. The Turner Road facility is still in an outage due to several problems that started back in December 2019. The latest is with the alignment of the generator sitting too low and rubbing. The Lake House Development is in the process of a full EIR study contracted with Stantec. Unions have approached them for a labor agreement. There is currently no active EIR proceeding at the City level. The CAISO software appears to have bugs and glitches for Use Limited Resources impacting the Alameda units.

Hydro – Current precipitation for the year through April 30th is at 44 inches of rain or 10% above normal. The snow pack is 145% of normal. Warm spring weather is melting the snow. The current snow line is approximately 5500 feet with lots of snow still at 7000 feet and above. New Spicer Meadows is now approximately half-full. Decent revenues are coming in from Collierville with good reg. down.

Geo – There were no safety incidents at Geo. Topics for the month included crane safety and heat stress. Hearing tests were conducted for the Geo staff. The current baseload net generation for April 2019 was 48.5 MW, with an estimated monthly total of 47.5 GWh. Average April net generation is 65.9 MW. This is down due to the overhaul outages. The Unit 2 overhaul started April 1, and is nearing completion. A dual unit outage is currently going on as the overhaul for Unit 1 started April 22. Unit 2 is scheduled to return to service May 10 with the overhaul progressing on schedule. Unit 1 will remain out until May 26. Work for Unit 1 is progressing with turbine and generator inspection and repair, condenser cleaning, ball cleaning system, steam ejector replacement, electrical cleaning and testing, and the Stretford system.

7. **MSSA Deviation Equation Status Update** – Staff provided an update regarding the Metered Substation Aggregator Agreement (MSSAA) Schedule 19, which explicitly refers to the concept of downward Instructed Imbalance Energy (IIE) termed as “Decremental,” meaning values decreasing across market processes within a single interval, sometimes confused as changes from interval to interval. The MSSAA Schedule 19 reads as; IIE is expected energy associated with those ADS instruction service types that represent a requirement for the delivery of energy to the CAISO that is incremental, or decremental to the MSSA’s load-following needs.

In 2014, the CAISO released settlement configurations that incorrectly disqualified downward economic IIE bids for the compliance equation. NCPA discovered this in 2015 while attempting to utilize decremental bids in order to manage water during the drought and submitted placeholder disputes. In disputes, NCPA identified facts that compliance IIE is inconsistent with energy charge codes and suggested alternatives for CAISO equation such as utilizing NCPA’s submitted value or CAISO’s Expected Energy results.

NCPA staff have been working with the CAISO for a solution to this problem. The CAISO has notified NCPA that a Settlements Business Practice Manual Proposed Revision Request will be released within days that will utilize CAISO Expected Energy Calculation in IIE configuration. Changes will go live May 8, 2019, and will apply retrospective back to January 1, 2018, and forward. NCPA scheduling staff began testing decremental bid strategies April 30. Results are currently pending. Staff will continue to work with the CAISO on this issue, and update the Committee as needed.

8. **Planning and Operations Update** –

- CCA Activities Update – EBCE has met the collateral obligations at the CAISO; as such, EBCE’s transition to their own SCID should be completed by mid-June. Staff is currently working SJCE to become their own SCID as well.
- Opportunities to Sell Project Attributes – Staff have setup a conference call with Members this Friday (5/3), to discuss green energy for the CCAs. Topics for discussion include:
 - GHG-Free Energy
 - Review of draft form WSPP Confirmation

- Working to calculate “excess” supply – What is “excess” supply?
- Review of NCPA authority to transact on behalf of Members
- SFWPA – Staff will reach out to schedule meetings with individual Members to seek interest in business opportunities with SFWPA.
- Day-Ahead Market Enhancements (DAME) Update – DAME is currently not moving forward with implementing the 15-minute scheduling at this time.
- Nevada Irrigation District – Staff submitted a Request for Interest on April 30, 2019.
- Order 890 Activities – NCPA is continuing to work with PG&E. A meeting is scheduled for May 15, 2019 to discuss a new Pilot Project.

9. Schedule next meeting date – The next regular Facilities Committee meeting is scheduled for June 5, 2019.

ADJOURNMENT

The meeting was adjourned at 12:03 pm.

**Northern California Power Agency
May 1, 2019 Facilities Committee Meeting
Attendance List**

NCPA Facilities Committee Members are requested to sign, but signature by members of the public is voluntary.

<u>MEMBER</u>	<u>NAME</u>
ALAMEDA	
BART	
BIGGS	
GRIDLEY	
HEALDSBURG	
LODI	
LOMPOC	<i>Jay Singh</i> <i>Tikhan Singh</i>
PALO ALTO	
PLUMAS-SIERRA REC	
PORT OF OAKLAND	
REDDING	
ROSEVILLE	<i>[Signature]</i>
SANTA CLARA	
TID	
UKIAH	



Commission Staff Report

May 14, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: April 30, 2019 Financial Report (Unaudited)

AGENDA CATEGORY: Consent

FROM:	Sondra Ainsworth <i>SA</i>	METHOD OF SELECTION:
	Treasurer-Controller	N/A
Division:	Administrative Services	
Department:	Accounting & Finance	

IMPACTED MEMBERS:

All Members	<input checked="" type="checkbox"/>	City of Lodi	<input type="checkbox"/>	City of Shasta Lake	<input type="checkbox"/>
Alameda Municipal Power	<input type="checkbox"/>	City of Lompoc	<input type="checkbox"/>	City of Ukiah	<input type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Palo Alto	<input type="checkbox"/>	Plumas-Sierra REC	<input type="checkbox"/>
City of Biggs	<input type="checkbox"/>	City of Redding	<input type="checkbox"/>	Port of Oakland	<input type="checkbox"/>
City of Gridley	<input type="checkbox"/>	City of Roseville	<input type="checkbox"/>	Truckee Donner PUD	<input type="checkbox"/>
City of Healdsburg	<input type="checkbox"/>	City of Santa Clara	<input type="checkbox"/>	Other	<input type="checkbox"/>

If other, please specify

RECOMMENDATION:

Approval by all members

NOTICE:

The disbursements of the Northern California Power Agency for the month reported herein, will be approved at the May 23, 2019 meeting of the NCPA Commission. The following page is a summary of those disbursements.

Prior to the Chairman's call to order, the Assistant Secretary to the Commission will, upon request, make available for review the detailed listing of those disbursements.

The report of budget vs. actual costs and the unaudited April 2019 financial reports are also included.

FISCAL IMPACT:

This report has no direct budget impact to the Agency.

ENVIRONMENTAL ANALYSIS:

The financial report would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary.

Respectfully submitted,



RANDY S. HOWARD
General Manager

Attachments: (1)

**NORTHERN CALIFORNIA POWER AGENCY
and ASSOCIATED POWER CORPORATIONS**

**Schedule of Disbursements
(Unaudited)**

For the Month of April 2019

Operations:

Geothermal	\$	2,086,310
Hydroelectric		3,087,390
CT#1 Combustion Turbines		479,742
CT#2 STIG		574,707
Lodi Energy Center		6,496,639
NCPA Operating		<u>26,992,952</u>
Total	\$	<u><u>39,717,740</u></u>

NORTHERN CALIFORNIA POWER AGENCY
 REPORT OF BUDGET VS. ACTUAL COST
 FOR THE PERIOD ENDED APRIL 30, 2019

PERCENT OF YEAR ELAPSED 83%

	This Month	Actual Year To-Date	FY 2019 Budget	% Used	
GENERATION RESOURCES					
NCPA Plants					
Hydroelectric					
Other Plant Cost	\$ 1,264,102	\$ 13,346,736	\$ 16,699,691	80%	
Debt Service (Net)	2,451,545	28,819,164	35,156,824	82%	
Annual Budget Cost	3,715,647	42,165,900	51,856,515	81%	
Geothermal					
Other Plant Cost	2,859,174	24,962,680	29,488,515	85%	
Debt Service (Net)	411,408	4,114,080	4,936,896	83%	
Annual Budget Cost	3,270,582	29,076,760	34,425,411	84%	
Combustion Turbine No. 1	1,050,610	7,231,320	8,105,701	89%	(a)
Combustion Turbine No. 2 (Stig)					
Fuel and Pipeline Transport Charges	91,583	1,472,889	977,410	151%	(b)
Other Plant Cost	204,065	1,717,193	2,048,734	84%	
Debt Service (Net)	476,392	4,763,923	5,716,708	83%	
Annual Budget Cost	772,040	7,954,005	8,742,852	91%	
Lodi Energy Center					
Fuel	30,681	44,933,145	33,092,116	136%	(c)
Other Plant Cost	1,809,937	19,884,716	24,544,632	81%	
Debt Service (Net)	2,173,321	21,733,211	26,079,852	83%	
Annual Budget Cost	4,013,939	86,551,072	83,716,600	103%	
Member Resources - Energy	5,088,724	47,975,066	64,448,814	74%	
Member Resources - Natural Gas	84,372	3,613,918	3,098,278	117%	(d)
Western Resources	3,693,306	18,151,819	31,349,618	58%	
Market Power Purchases	1,419,521	20,174,900	15,539,033	130%	(e)
Load Aggregation Costs - CAISO	61,887,335	468,121,807	273,858,269	171%	(f)
Net GHG Obligations	-	2,123,545	1,122,972	189%	(g)
	84,996,076	733,140,112	576,264,063	127%	
TRANSMISSION					
Independent System Operator					
Grid Management Charge	558,391	5,175,830	3,662,271	141%	(h)
Wheeling Access Charge	6,427,586	75,385,722	104,569,875	72%	
Ancillary Services	1,759,033	9,135,724	3,040,303	300%	(i)
Other ISO Charges/(Credits)	6,646,203	16,676,557	1,549,274	1076%	(j)
	15,391,213	106,373,833	112,821,723	94%	
MANAGEMENT SERVICES					
Legislative & Regulatory					
Legislative Representation	132,610	1,634,827	2,023,068	81%	
Regulatory Representation	81,504	514,434	886,616	58%	
Western Representation	52,642	542,748	848,160	64%	
Member Services	8,434	186,777	438,389	43%	
Judicial Action	58,272	558,272	625,000	89%	(k)

Management Services continued on next page

NORTHERN CALIFORNIA POWER AGENCY
 REPORT OF BUDGET VS. ACTUAL COST
 FOR THE PERIOD ENDED APRIL 30, 2019

PERCENT OF
 YEAR ELAPSED
 83%

	This Month	Actual Year To-Date	FY 2019 Budget	% Used
Power Management				
System Control & Load Dispatch	456,669	4,759,119	6,107,416	78%
Forecasting, Planning, Prescheduling & Trading	199,058	2,087,278	2,775,167	75%
Industry Restructuring & Regulatory Affairs	28,608	292,806	438,813	67%
Contract Admin, Interconnection Svcs & External Affairs	73,330	686,677	1,134,623	61%
Green Power Project	24	254	2,964	9%
Gas Purchase Program	4,943	52,463	77,781	67%
Market Purchase Project	6,283	68,957	112,014	62%
Energy Risk Management	16,428	169,116	259,585	65%
Settlements	44,655	446,652	941,392	47%
Integrated Systems Support	54,166	154,685	272,850	57%
Participant Pass Through Costs	6,684	1,088,264	1,619,170	67%
Support Services	62,103	748,885	-	N/A
	1,286,413	13,992,214	18,563,008	75%
TOTAL ANNUAL BUDGET COST	101,673,702	853,506,159	707,648,794	121%
LESS: THIRD PARTY REVENUE				
Plant ISO Energy Sales	6,410,276	144,503,868	100,456,289	144% (l)
Member Resource ISO Energy Sales	1,340,479	32,299,539	28,186,777	115% (m)
NCPA Contracts ISO Energy Sales	748,417	23,389,044	14,720,326	159% (m)
Western Resource Energy Sales	3,136,015	20,266,402	23,182,775	87%
Load Aggregation Energy Sales	49,141,814	260,213,368	131,328,609	198% (n)
Ancillary Services Sales	497,801	4,537,103	4,409,129	103% (o)
Transmission Sales	9,198	91,980	110,376	83%
Western Credits, Interest and Other Income	3,722,125	21,058,501	37,414,086	56%
	65,006,125	506,359,805	339,808,367	149%
NET ANNUAL BUDGET COST TO PARTICIPANTS	\$ 36,667,577	\$ 347,146,354	\$ 367,840,427	94%

- (a) Increase in costs due to greater than projected MWhs of generation. CT1 is at 157% of budgeted MWhs at 4/30/19. Fuel costs and CA ISO charges have increased as a result of increased generation.
- (b) Increase in costs due to greater than projected MWhs of generation. CT2 is at 334% of budgeted MWhs at 4/30/19. Fuel costs and CA ISO charges have increased as a result of increased generation.
- (c) Increase in fuel costs due to higher price per mmBtu compared to budgeted price per mmBtu and greater than projected MWhs of generation. LEC is at 112% of budgeted MWhs at 4/30/19.
- (d) Increase due to greater than projected MWhs of generation at CT1, CT2, and LEC. See notes (a), (b), and (c).
- (e) Variance due to unbudgeted market purchases and NCPA contracts. Unbudgeted deals made after the FY19 budget including certain NextEra and Shell deals.
- (f) Increase due to higher than budgeted market prices and unbudgeted costs related to East Bay Community Energy and San Jose Community Energy.
- (g) Purchases made several months in advance. Increase primarily due to greater than anticipated GHG allowances purchased at auction for City of Lodi, Healdsburg, and BART.
- (h) Increase due to greater than projected MWhs of generation. See notes (a), (b), and (c).
- (i) Increase due to greater than projected MWhs of generation. See notes (a), (b), and (c).
- (j) The budget to actual variance is caused by unbudgeted CAISO costs including imbalance costs, neutrality allocations, congestion offsets, and other cost allocations. These costs are not budgeted due to their unpredictable nature.
- (k) Variance due to higher than anticipated legal costs related to privileged and confidential legal proceedings.
- (l) Increase due to higher market prices caused by California wildfires and higher natural gas prices. Increase also due to greater than projected MWhs of generation. See notes (a), (b), and (c).
- (m) Variance due to higher than anticipated ISO energy sales and higher market prices.
- (n) The load aggregation energy sales variance is due to unbudgeted sales related to East Bay Community Energy and San Jose Clean Energy.
- (o) Increase due to greater than projected MWhs of generation. See notes (a), (b), and (c) and corresponding increase in ancillary services costs.

COMBINED STATEMENTS OF NET POSITION

**NORTHERN CALIFORNIA POWER AGENCY
AND ASSOCIATED POWER CORPORATIONS**

UNAUDITED

	April 30,	
	2019	2018
	(in thousands)	
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 42,160	\$ 21,591
Investments	49,488	45,759
Accounts receivable		
Participants	22	2
Other	7,812	566
Interest receivable	344	232
Inventory and supplies	9,746	9,981
Prepaid expenses	894	768
TOTAL CURRENT ASSETS	<u>110,466</u>	<u>78,899</u>
RESTRICTED ASSETS		
Cash and cash equivalents	43,478	51,594
Investments	176,113	180,825
Interest receivable	693	804
TOTAL RESTRICTED ASSETS	<u>220,284</u>	<u>233,223</u>
ELECTRIC PLANT		
Electric plant in service	1,506,035	1,504,088
Less: accumulated depreciation	(998,948)	(968,363)
	<u>507,087</u>	<u>535,725</u>
Construction work-in-progress	182	215
TOTAL ELECTRIC PLANT	<u>507,269</u>	<u>535,940</u>
OTHER ASSETS		
Regulatory assets	228,682	230,010
Unused vendor credits	-	9
Preliminary survey and investigation costs	315	-
Investment in associated company	265	-
TOTAL ASSETS	<u>1,067,281</u>	<u>1,078,081</u>
DEFERRED OUTFLOWS OF RESOURCES		
Excess cost on refunding of debt	34,507	42,968
Pension deferrals	19,200	13,506
TOTAL DEFERRED OUTFLOWS OF RESOURCES	<u>53,707</u>	<u>56,474</u>
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	<u>\$ 1,120,988</u>	<u>\$ 1,134,555</u>

COMBINED STATEMENTS OF NET POSITION

NORTHERN CALIFORNIA POWER AGENCY
AND ASSOCIATED POWER CORPORATIONS

UNAUDITED

	April 30,	
	2019	2018
	(in thousands)	
LIABILITIES		
CURRENT LIABILITIES		
Accounts payable and accrued expenses	\$ 30,345	\$ 23,859
Accounts and retentions payable - restricted for construction	10	-
Member advances	1,279	1,068
Operating reserves	25,837	21,171
Current portion of long-term debt	33,505	41,545
Accrued interest payable	11,382	12,312
TOTAL CURRENT LIABILITIES	<u>102,358</u>	<u>99,955</u>
NON-CURRENT LIABILITIES		
Net pension and OPEB liability	76,002	64,589
Operating reserves and other deposits	150,609	141,952
Interest rate swap liability	14,326	13,819
Long-term debt, net	660,002	706,643
TOTAL NON-CURRENT LIABILITIES	<u>900,939</u>	<u>927,003</u>
TOTAL LIABILITIES	<u>1,003,297</u>	<u>1,026,958</u>
DEFERRED INFLOWS OF RESOURCES		
Regulatory credits	68,129	71,415
Pension and OPEB deferrals	3,195	4,460
TOTAL DEFERRED INFLOWS OF RESOURCES	<u>71,324</u>	<u>75,875</u>
NET POSITION		
Net investment in capital assets	(53,869)	(67,348)
Restricted	50,753	64,984
Unrestricted	49,483	34,086
TOTAL NET POSITION	<u>46,367</u>	<u>31,722</u>
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	<u>\$ 1,120,988</u>	<u>\$ 1,134,555</u>

**COMBINED STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION**

**NORTHERN CALIFORNIA POWER AGENCY
AND ASSOCIATED POWER CORPORATIONS**

UNAUDITED

	Ten Months Ended April 30,	
	2019	2018
	(in thousands)	
OPERATING REVENUES		
Participants	\$ 376,630	\$ 305,473
Other Third-Party	226,063	166,573
TOTAL OPERATING REVENUES	602,693	472,046
OPERATING EXPENSES		
Purchased power	256,288	199,959
Operations	86,860	62,918
Transmission	154,122	112,256
Depreciation	25,723	25,812
Maintenance	19,757	16,585
Administrative and general	17,498	17,229
TOTAL OPERATING EXPENSES	560,248	434,759
NET OPERATING REVENUES	42,445	37,287
NON OPERATING (EXPENSES) REVENUES		
Interest expense	(34,142)	(32,969)
Interest income	7,666	4,258
Other	6,648	6,570
TOTAL NON OPERATING EXPENSES	(19,828)	(22,141)
FUTURE RECOVERABLE AMOUNTS	(2,466)	(6,234)
REFUNDS TO PARTICIPANTS	(11,852)	(11,251)
INCREASE (DECREASE) IN NET POSITION	8,299	(2,338)
NET POSITION, Beginning of year	38,068	34,060
NET POSITION, Period ended	\$ 46,367	\$ 31,722

OTHER FINANCIAL INFORMATION
COMBINING STATEMENT OF NET POSITION
NORTHERN CALIFORNIA POWER AGENCY
AND ASSOCIATED POWER CORPORATIONS
(000's omitted)

April 30, 2019

	GENERATING & TRANSMISSION RESOURCES										Other Agency	Combined	
	Geothermal	Hydroelectric	Multiple Capital Facilities	CT No. One	Lodi Energy Center	Transmission No. One	Purchased Power & Transmission	Associated Member Services					
ASSETS													
CURRENT ASSETS													
Cash and cash equivalents	\$ 1	\$ -	\$ 1	\$ 1	\$ 74	\$ -	\$ -	\$ -	\$ 357	\$ -	\$ 41,726	\$ 42,160	
Investments	-	-	-	-	-	-	-	-	-	-	49,488	49,488	
Accounts receivable													
Participants	-	-	-	-	-	-	-	-	-	-	22	22	
Other	11	-	-	-	-	-	-	-	3,610	-	4,191	7,812	
Interest receivable	-	-	-	-	-	-	-	-	111	-	232	344	
Inventory and supplies	4,509	1,079	642	1,405	2,111	-	-	-	-	-	-	9,746	
Prepaid expenses	-	-	-	-	340	-	-	-	-	-	548	894	
Due from Agency and other programs*	17,618	18,011	2,241	1,287	12,295	-	-	-	23,789	-	(90,677)	-	
TOTAL CURRENT ASSETS	22,139	19,090	2,884	2,693	14,820	-	-	-	27,510	15,800	5,530	110,466	
RESTRICTED ASSETS													
Cash and cash equivalents	567	12,626	532	-	7,411	-	-	-	1,654	-	20,688	43,478	
Investments	29,872	29,148	4,627	-	31,902	-	-	-	26,835	-	53,729	176,113	
Interest receivable	133	88	11	-	139	-	-	-	-	-	322	693	
TOTAL RESTRICTED ASSETS	30,572	41,862	5,170	-	39,452	-	-	-	28,489	-	74,739	220,284	
ELECTRIC PLANT													
Electric plant in service	571,299	394,918	64,852	36,552	423,846	7,736	-	-	839	-	5,993	1,506,035	
Less: accumulated depreciation	(538,677)	(270,134)	(50,200)	(34,638)	(93,734)	(7,736)	-	-	(486)	-	(3,343)	(998,948)	
	32,622	124,784	14,652	1,914	330,112	-	-	-	353	-	2,650	507,087	
Construction work-in-progress	-	-	-	-	182	-	-	-	-	-	-	182	
TOTAL ELECTRIC PLANT	32,622	124,784	14,652	1,914	330,294	-	-	-	353	-	2,650	507,269	
OTHER ASSETS													
Regulatory assets	(1,224)	134,082	8,862	-	25,169	-	-	-	-	-	61,793	228,682	
Preliminary survey and investigation costs	-	-	-	-	-	-	-	-	-	-	-	315	
Investment in associated company	-	-	-	-	-	-	-	-	-	-	265	265	
TOTAL ASSETS	84,109	319,818	31,568	4,607	409,735	-	-	-	55,999	16,468	144,977	1,067,281	
DEFERRED OUTFLOWS OF RESOURCES													
Excess cost on refunding of debt	1,585	30,248	800	-	1,874	-	-	-	-	-	-	34,507	
Pension deferrals	-	-	-	-	-	-	-	-	-	-	19,200	19,200	
TOTAL DEFERRED OUTFLOWS OF RESOURCES	1,585	30,248	800	-	1,874	-	-	-	-	-	19,200	53,707	
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$ 85,694	\$ 350,066	\$ 32,368	\$ 4,607	\$ 411,609	\$ -	\$ -	\$ -	\$ 55,999	\$ 16,468	\$ 164,177	\$ 1,120,988	

* Eliminated in Combination

OTHER FINANCIAL INFORMATION
COMBINING STATEMENT OF NET POSITION
NORTHERN CALIFORNIA POWER AGENCY
AND ASSOCIATED POWER CORPORATIONS
(000's omitted)

April 30, 2019

	GENERATING & TRANSMISSION RESOURCES									
	Geothermal	Hydroelectric	Multiple Capital Facilities	CT No. One	Lodi Energy Center	Transmission	Purchased Power & Transmission	Associated Member Services	Other Agency	Combined
\$	224	770	24	36	40	24,152	5,099	30,345		
Accounts payable and accrued expenses	-	10	-	-	-	-	-	10		
Accounts and retentions payable - restricted for construction	791	-	-	-	-	-	488	1,279		
Member advances	9,188	250	513	2,326	13,560	-	-	25,837		
Operating reserves	4,420	13,410	4,195	-	11,480	-	-	33,505		
Current portion of long-term debt	175	4,771	378	-	6,058	-	-	11,382		
Accrued interest payable	14,798	19,211	5,110	2,362	31,138	24,152	488	102,358		
TOTAL CURRENT LIABILITIES										
	41,426	311,926	25,897	-	332,264	28,600	10,082	900,939		
TOTAL NON-CURRENT LIABILITIES										
	56,224	331,137	31,007	2,362	363,402	52,752	10,570	1,003,297		
TOTAL LIABILITIES										
	18,077	4,036	892	2,079	39,601	-	354	68,129		
DEFERRED INFLOWS OF RESOURCES										
Regulatory credits	-	-	-	-	-	-	-	3,195		
Pension and OPEB deferrals	18,077	4,036	892	2,079	39,601	-	354	71,324		
TOTAL DEFERRED INFLOWS OF RESOURCES										
	18,077	4,036	892	2,079	39,601	-	354	71,324		
NET POSITION										
Net investment in capital assets	(3,977)	(20,786)	(6,624)	-	(22,482)	-	-	(53,869)		
Restricted	8,176	18,239	4,791	-	23,523	-	(3,973)	50,753		
Unrestricted	7,194	17,440	2,302	166	7,565	3,247	9,517	49,483		
TOTAL NET POSITION										
	11,393	14,893	469	166	8,606	3,247	5,544	46,367		
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION										
\$	85,694	350,066	32,368	4,607	411,609	55,999	16,468	1,120,988		

OTHER FINANCIAL INFORMATION

COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

NORTHERN CALIFORNIA POWER AGENCY
AND ASSOCIATED POWER CORPORATIONS
(000's omitted)

For the Ten Months Ended April 30, 2019

	GENERATING & TRANSMISSION RESOURCES									
	Geothermal	Hydroelectric	Multiple Capital Facilities	CT No. One	Lodi Energy Center	Transmission	Purchased Power & Transmission	Associated Member Services	Other Agency	Combined
OPERATING REVENUES										
Participants	\$ (2,298)	\$ 16,013	\$ 3,921	\$ 5,533	\$ 10,354	\$ -	\$ 322,931	\$ 19,493	\$ 683	\$ 376,630
Other Third-Party	32,974	35,573	2,080	1,855	77,074	-	76,544	(37)	-	226,063
TOTAL OPERATING REVENUES	30,676	51,586	6,001	7,388	87,428	-	399,475	19,456	683	602,693
OPERATING EXPENSES										
Purchased power	571	3,007	96	268	4,362	-	247,984	-	-	256,288
Operations	13,127	3,734	2,000	1,830	52,971	-	3,614	9,584	-	86,860
Transmission	248	314	51	194	739	-	152,573	3	-	154,122
Depreciation	3,265	7,909	1,836	160	12,181	-	-	88	284	25,723
Maintenance	7,403	3,734	483	4,311	3,714	-	-	112	-	19,757
Maintenance and general	3,296	3,322	478	654	4,038	-	-	5,625	85	17,498
Intercompany (sales) purchases, net*	(556)	217	58	83	248	-	-	(50)	-	-
TOTAL OPERATING EXPENSES	27,354	22,237	5,002	7,500	78,253	-	404,171	15,362	369	560,248
NET OPERATING REVENUES	3,322	29,349	999	(112)	9,175	-	(4,696)	4,094	314	42,445
NON OPERATING (EXPENSES) REVENUES										
Interest expense	(447)	(20,158)	(1,238)	-	(12,299)	-	-	-	-	(34,142)
Interest income	925	1,111	115	2	1,235	-	1,087	78	3,113	7,666
Other	(1)	(2)	2,090	-	4,167	-	65	45	284	6,648
TOTAL NON OPERATING (EXPENSES) REVENUES	477	(19,049)	967	2	(6,897)	-	1,152	123	3,397	(19,828)
FUTURE RECOVERABLE AMOUNTS	(1,441)	(659)	(1,746)	-	1,380	-	-	-	-	(2,466)
REFUNDS TO PARTICIPANTS	(2,889)	(2,135)	(160)	902	1,704	-	(1,305)	(5,470)	(2,499)	(11,852)
INCREASE (DECREASE) IN NET POSITION	(531)	7,506	60	792	5,362	-	(4,849)	(1,253)	1,212	8,299
NET POSITION, Beginning of year	11,924	7,387	409	(626)	3,244	-	8,096	6,797	837	38,068
NET POSITION, Period ended	\$ 11,393	\$ 14,893	\$ 469	\$ 166	\$ 8,606	\$ -	\$ 3,247	\$ 5,544	\$ 2,049	\$ 46,367

* Eliminated in Combination

NORTHERN CALIFORNIA POWER AGENCY & ASSOCIATED POWER CORPORATIONS
AGED ACCOUNTS RECEIVABLE
April 30, 2019

<u>Status</u>	<u>Participant / Customer</u>	<u>Description</u>	<u>Amount</u>
CURRENT			\$ 7,800,430
PAST DUE:			
1 - 30	HB Soil Solutions	Sulfer sale	276
	Merced Irrigation District	Power Mgt Service Fees - April	33,312
31 - 60			
61 - 90			
91 - 120			
Over 120 Days			
PARTICIPANT and OTHER RECEIVABLES (net)			<u>\$ 7,834,018</u>



11

Commission Staff Report

May 15, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: Treasurer's Report for Month Ended April 30, 2019

AGENDA CATEGORY: Consent

FROM: Sondra Ainsworth <i>S.A.</i>	METHOD OF SELECTION:
Treasurer-Controller	N/A
Division: Administrative Services	
Department: Accounting & Finance	

IMPACTED MEMBERS:

All Members	<input checked="" type="checkbox"/>	City of Lodi	<input type="checkbox"/>	City of Shasta Lake	<input type="checkbox"/>
Alameda Municipal Power	<input type="checkbox"/>	City of Lompoc	<input type="checkbox"/>	City of Ukiah	<input type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Palo Alto	<input type="checkbox"/>	Plumas-Sierra REC	<input type="checkbox"/>
City of Biggs	<input type="checkbox"/>	City of Redding	<input type="checkbox"/>	Port of Oakland	<input type="checkbox"/>
City of Gridley	<input type="checkbox"/>	City of Roseville	<input type="checkbox"/>	Truckee Donner PUD	<input type="checkbox"/>
City of Healdsburg	<input type="checkbox"/>	City of Santa Clara	<input type="checkbox"/>	Other	<input type="checkbox"/>

If other, please specify

RECOMMENDATION:

Approval by all members.

BACKGROUND:

In compliance with Agency policy and State of California Government Code Sections 53601 and 53646(b), the following monthly report is submitted for your information and acceptance.

Cash – At month end cash totaled \$6,293,953 of which approximately \$317,003 was applicable to Special and Reserve Fund Deposits, \$4,460 to Debt Service and \$5,972,490 to Operations and other.

The cash balance held at U.S. Bank includes outstanding checks that have not yet cleared. This cash balance is invested nightly in a fully collateralized (U.S. Government Securities) repurchase agreement.

Investments – The carrying value of NCPA's investment portfolio totaled \$304,726,749 at month end. The current market value of the portfolio totaled \$304,455,486.

The overall portfolio had a combined weighted average interest rate of 2.310% with a bond equivalent yield (yield to maturity) of 2.342%. Investments with a maturity greater than one year totaled \$177,201,000. April maturities totaled \$20 million and monthly receipts totaled \$55 million. During the month \$43 million was invested.

Funds not required to meet annual cash flow are reinvested and separately reported as they occur.

Interest Rates – During the month, rates on 90-day T-Bills remained unchanged at 2.44% and rates on one year T-Bills increased 2 basis points (from 2.41% to 2.43%).

To the best of my knowledge and belief, all securities held by NCPA as of April 30, 2019 are in compliance with the Agency's investment policy. There are adequate cash flow and investment maturities to meet next month's cash requirements.

FISCAL IMPACT:

This report has no direct budget impact to the Agency.

ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

Respectfully submitted



RANDY S. HOWARD
General Manager

Attachment

SR: 157:19

NORTHERN CALIFORNIA POWER AGENCY

TREASURER'S REPORT

APRIL 30, 2019

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DETAIL REPORT OF INVESTMENTS	APPENDIX

**Northern California Power Agency
Treasurer's Report
Cash & Investment Balance
April 30 2019**

	CASH	INVESTMENTS	TOTAL	PERCENT
NCPA FUNDS				
Operating	\$ 5,072,174	\$ 114,202,397	\$ 119,274,571	38.35%
Special Deposits	899,888	-	899,888	0.30%
Construction	428	5,045,555	5,045,983	1.62%
Debt Service	4,460	39,893,223	39,897,683	12.83%
Special & Reserve	317,003	145,585,574	145,902,577	46.91%
	<u>\$ 6,293,953</u>	<u>\$ 304,726,749</u>	<u>\$ 311,020,702</u>	<u>100.00%</u>

Portfolio Investments at Market Value

\$ 304,455,486

NOTE A -Investment amounts shown at book carrying value.

**Northern California Power Agency
Treasurer's Report
Cash Activity Summary
April 30 2019**

	RECEIPTS			EXPENDITURES			CASH INCREASE / (DECREASE)
	OPS/CONSTR	INTEREST (NOTE B)	INVESTMENTS (NOTE A)	OPS/CONSTR	INVESTMENTS (NOTE B)	INTER-COMPANY/ FUND TRANSFERS	
NCPA FUNDS							
Operating	\$ 48,327,527	\$ 152,999	\$ 15,223,457	\$ (23,828,147)	\$ (26,571,571)	\$ (9,910,298)	\$ 3,393,967
Special Deposits	6,774,386	11	-	(10,504,273)	-	3,729,487	(389)
Construction	-	-	-	-	(1,683,233)	-	(1,683,233)
Debt Service	-	1,058	9,885	(7,193,063)	(8,671,622)	5,387,674	(10,466,068)
Special & Reserve	-	271,318	5,015,575	(5,833,869)	(6,064,312)	793,137	(5,818,151)
	<u>\$ 55,101,913</u>	<u>\$ 425,386</u>	<u>\$ 20,248,917</u>	<u>\$ (47,359,352)</u>	<u>\$ (42,990,738)</u>	<u>\$ -</u>	<u>\$ (14,573,874)</u>

NOTE A -Investment amounts shown at book carrying value.

NOTE B -Net of accrued interest purchased on investments.

**Northern California Power Agency
Treasurer's Report
Investment Activity Summary
April 30 2019**

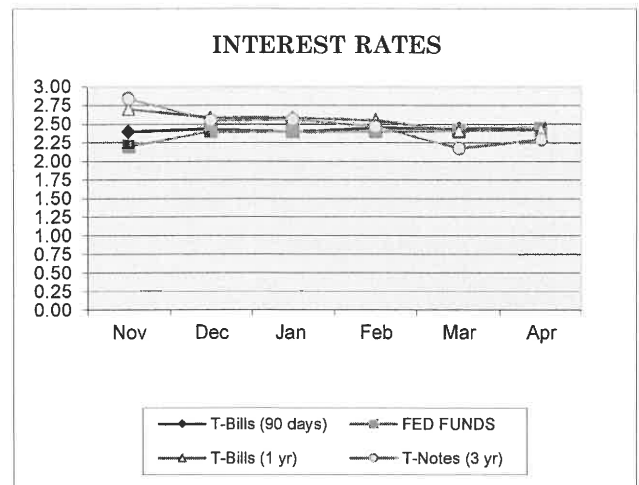
	PURCHASED	SOLD OR MATURED	(NON-CASH)	(NON-CASH)	INVESTMENTS		
			DISC/(PREM) AMORT	GAIN/(LOSS) ON SALE	TRANSFERS	INCREASE / (DECREASE)	
NCPA FUNDS							
Operating	\$ 26,571,571	\$ (15,223,457)	\$ 13,239	\$ -	\$ -	\$ -	\$ 11,361,353
Special Deposits	-	-	-	-	-	-	-
Construction	1,683,233	-	4,746	-	-	-	1,687,979
Debt Service	8,671,622	(9,885)	68,878	-	-	-	8,730,615
Special & Reserve	6,064,312	(5,015,575)	(2,152)	-	-	-	1,046,585
	<u>\$ 42,990,738</u>	<u>\$ (20,248,917)</u>	<u>\$ 84,711</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 22,826,532</u>
Less Non- Cash Activity							
Disc/(Prem) Amortization & Gain/(Loss) on Sale							<u>(84,711)</u>
Net Change in Investment --Before Non-Cash Activity							<u>\$ 22,741,821</u>

NOTE A -Investment amounts shown at book carrying value.

**Northern California Power Agency
Interest Rate/Yield Analysis
April 30, 2019**

	<u>WEIGHTED AVERAGE INTEREST RATE</u>	<u>BOND EQUIVALENT YIELD</u>
OVERALL COMBINED	<u><u>2.310%</u></u>	<u><u>2.342%</u></u>
<u>OPERATING FUNDS:</u>	<u>2.210%</u>	<u>2.313%</u>
<u>PROJECTS:</u>		
Geothermal	2.501%	2.596%
Capital Facilities	2.376%	2.406%
Hydroelectric	2.465%	2.550%
Lodi Energy Center	2.204%	2.023%

KEY INTEREST RATES		
	<u>CURRENT</u>	<u>PRIOR YEAR</u>
Fed Fds (Overnight)	2.44%	1.70%
T-Bills (90da.)	2.44%	1.85%
Agency Disc (90da.)	2.35%	1.74%
T-Bills (1yr.)	2.43%	2.25%
Agency Disc (1yr.)	2.25%	1.91%
T-Notes (3yr.)	2.30%	2.63%



**Northern California Power Agency
Total Portfolio
Investment Maturities Analysis
April 30, 2019**

Type	0-7 Days	8-90 Days	91-180 Days	181-270 Days	271-365 Days	1-5 Years	6-10 Years	Total	Percent
US Government Agencies	\$ 895	\$ 44,889	\$ 3,476	\$ 4,464	\$ -	\$ 113,505	\$ 6,640	\$ 173,869	56.00%
Corporate Bonds (MTN)	-	-	-	-	-	55,410	-	55,410	17.85%
US Bank Trust Money Market	349	-	-	-	-	-	-	349	0.11%
Commercial Paper	10,025	-	-	-	-	-	-	10,025	3.24%
Investment Trusts (LAIF)	54,821	-	-	-	-	-	-	54,821	17.66%
Investment Trusts (CAMP)	5,067	-	-	-	-	-	-	5,067	1.64%
U.S.Treasury Market Acct. *	6,817	-	-	-	-	-	-	6,817	2.20%
U.S.Treasury Bill/Note	-	2,422	48	-	-	146	-	2,616	0.84%
Certificates of Deposit	-	10	-	-	-	1,500	-	1,510	0.49%
Total Dollars	\$ 77,974	\$ 47,321	\$ 3,524	\$ 4,464	\$ 0	\$ 170,561	\$ 6,640	\$ 310,484	100.00%
Total Percents	25.10%	15.24%	1.14%	1.44%	0.00%	54.93%	2.14%	100.00%	

Investments are shown at Face Value, in thousands.

* The cash balance held at US Bank includes outstanding checks that have not yet cleared. This cash balance is invested nightly in a fully collateralized (U.S. Government Securities) repurchase agreement. Cash held by Union Bank of California is invested nightly in fully collateralized U.S. Treasury Securities.

NORTHERN CALIFORNIA POWER AGENCY

Detail Report Of Investments

APPENDIX

Note: **This appendix has been prepared to comply with
Government Code section 53646.**

Operating

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
US Bank, N.A.	USB	7,215,000	1.850	11/26/2014	7,215,000		1	1.850	7,215,000	SYS70101	70101	7,215,000
Local Agency Investm	LAIF	33,792,331	2.546	07/01/2013	33,792,331		1	2.546	33,792,331	SYS70000	70000	33,792,331
California Asset Mgm	CMP	4,438	2.640	10/19/2018	4,438		1	2.640	4,438	SYS70070	70070	4,438
Union Bank of Califo	UBOC	25,644	0.002	07/01/2013	25,644		1	0.002	25,644	SYS70014	70014	25,644
US Bank	USB	5,072,174	0.001	06/30/2013	5,072,174		1	0.001	5,072,174	SYS70050	70050	5,072,174
US Bank	USB	2,810,498	0.850	09/24/2017	2,810,498		1	0.850	2,810,498	SYS70056	70056	2,810,498
Federal Home Loan Mt	UBOC	4,000,000	1.750	06/09/2015	4,046,160	05/30/2019	29	1.450	3,997,800	3137EADG1	26231	4,000,935
US Bank	USB	10,000	0.050	04/07/2019	10,000	07/07/2019	67	0.050	10,000	SYS30317	30317	10,000
General Dynamics	UBOC	1,000,000	2.875	09/20/2018	998,980	05/11/2020	376	2.937	1,003,400	369550BA5	26668	999,361
Federal Home Loan Ba	UBOC	4,975,000	1.600	08/28/2017	4,990,373	07/17/2020	443	1.490	4,926,295	3130ABTW6	26466	4,981,451
Walmart, Inc.	UBOC	1,000,000	1.900	09/20/2018	979,580	12/15/2020	594	2.848	990,470	931142EA7	26674	985,186
John Deere Capital C	UBOC	500,000	2.350	09/21/2018	492,195	01/08/2021	618	3.057	498,140	24422ETZ2	26676	494,271
Federal Home Loan Ba	UBOC	2,785,000	1.400	07/19/2016	2,783,608	01/19/2021	629	1.411	2,741,053	3130A8P80	26355	2,784,469
Cisco Systems Inc.	UBOC	1,000,000	2.200	09/20/2018	982,020	02/28/2021	669	2.969	994,010	17275RBD3	26667	986,546
Home Depot Inc.	UBOC	500,000	2.000	03/21/2018	487,800	04/01/2021	701	2.846	495,795	437076BL5	26558	492,277
Intel Corp	UBOC	1,000,000	1.700	09/20/2018	968,960	05/19/2021	749	2.919	982,180	458140AW0	26670	976,113
Pfizer Inc	UBOC	500,000	1.950	06/12/2018	487,130	06/03/2021	764	2.858	495,085	717081DX8	26617	490,963
Federal Home Loan Mt	UBOC	1,000,000	2.500	06/28/2018	1,000,000	06/28/2021	789	2.990	1,000,660	3134GSA6	26628	1,000,000
Federal Farm Credit	UBOC	2,602,000	1.720	09/28/2017	2,611,784	07/26/2021	817	1.620	2,567,471	3133EHSR5	26465	2,607,594
Federal Home Loan Mt	UBOC	3,500,000	1.500	11/23/2016	3,500,000	09/23/2021	845	1.500	3,433,465	3134GAVH4	26385	3,500,000
American Honda Finan	UBOC	1,000,000	1.700	09/20/2018	959,220	09/09/2021	862	3.149	980,610	02865WBG5	26669	967,651
3M Company	UBOC	1,000,000	3.000	09/21/2018	995,480	09/14/2021	867	3.018	1,012,870	88579YBA8	26675	999,587
Federal Home Loan Mt	UBOC	202,000	2.200	01/30/2017	202,000	01/26/2022	1,001	2.200	201,212	3134GAV92	26403	202,000
Procter & Gamble	UBOC	1,000,000	2.300	09/20/2018	975,770	02/06/2022	1,012	3.060	995,170	742718DY2	26673	980,174
Johnson & Johnson	UBOC	1,000,000	2.250	09/20/2018	976,140	03/03/2022	1,037	2.982	994,970	478180CD4	26671	980,382
TD Ameritrade	UBOC	500,000	2.950	05/15/2018	493,385	04/01/2022	1,066	3.315	503,650	87238YAE8	26601	495,025
PepsiCo Inc.	UBOC	500,000	2.250	03/21/2018	487,005	05/02/2022	1,097	2.924	495,290	713448DT2	26557	490,515
Apple Inc.	UBOC	1,123,337	2.300	02/01/2018	1,121,966	05/11/2022	1,106	2.329	1,114,755	037833CQ1	26525	1,122,366
Boeing Co.	UBOC	500,000	2.200	06/12/2018	482,180	10/30/2022	1,278	3.074	490,660	097023BN4	26612	485,782
American Honda Finan	UBOC	500,000	2.600	06/12/2018	488,560	11/16/2022	1,295	3.157	498,345	02665WCA7	26614	490,841
Chevron Corp.	UBOC	500,000	2.355	03/21/2018	485,760	12/05/2022	1,314	3.008	494,240	166764AB6	26555	489,122
Visa Inc.	UBOC	400,000	2.800	08/03/2018	394,552	12/14/2022	1,323	3.135	402,760	92826CA06	26647	395,481
Toyota Motor Credit	UBOC	1,000,000	2.700	08/03/2018	974,760	01/11/2023	1,351	3.315	999,020	89236TEL5	26645	978,993
Simon Property Group	UBOC	500,000	2.750	05/15/2018	484,585	02/01/2023	1,372	3.464	499,390	828807CN5	26603	487,730
Oracle Corp.	UBOC	500,000	2.625	03/21/2018	488,010	02/15/2023	1,386	3.154	498,275	68389XBR5	26556	490,729
Exxon Mobil Corporat	UBOC	1,000,000	2.726	08/03/2018	985,450	03/01/2023	1,400	3.068	1,002,900	30231GAR3	26648	987,816
John Deere Capital C	UBOC	500,000	2.800	06/12/2018	489,875	03/06/2023	1,405	3.264	500,770	24422ETG4	26613	491,770
Berkshire Hathaway I	UBOC	500,000	2.750	03/21/2018	492,280	03/15/2023	1,414	3.086	501,345	084670BR8	26554	494,001
United Parcel Servis	UBOC	500,000	2.500	05/15/2018	483,225	04/01/2023	1,431	3.248	497,645	911312BK1	26600	486,530
United Parcel Servis	UBOC	500,000	2.500	09/21/2018	483,120	04/01/2023	1,431	3.308	497,645	911312BK1	26677	485,398

Northern California Power Agency
Treasurer's Report

04/30/2019

Operating

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Bank of NY Mellon Co	UBOC	500,000	3.500	05/15/2018	501,265	04/28/2023	1,458	3.443	512,895	06406RAG2	26602	501,020
Hershey Company	UBOC	500,000	3.375	06/12/2018	503,125	05/15/2023	1,475	3.236	514,130	427866AZ1	26615	502,563
US Bank	UBOC	1,000,000	3.400	08/03/2018	1,000,000	07/24/2023	1,545	3.399	1,023,960	90331HNV1	26646	1,000,000
Microsoft Corp.	UBOC	1,000,000	2.000	09/20/2018	947,350	08/08/2023	1,560	3.172	976,600	594918BQ6	26672	953,969
Federal Farm Credit	UBOC	1,500,000	3.340	11/21/2018	1,500,000	10/04/2023	1,617	3.339	1,504,725	3133EJE39	26714	1,500,000
JP Morgan	UBOC	500,000	3.875	02/15/2019	514,550	02/01/2024	1,737	3.561	520,315	46625HJTB	26760	513,931
Fund Total and Average		\$ 91,517,422	2.114		\$ 91,172,278		402	2.232	\$ 91,289,856			\$ 91,202,627

MPP GHG Auction Acct

Local Agency Investm		356,952	2.546	07/01/2013	356,952		1	2.546	356,952	SYST0045	70045	356,952
Fund Total and Average		\$ 356,952	2.546		\$ 356,952		1	2.546	\$ 356,952			\$ 356,952

SCPA Balancing Account

Local Agency Investm	LAIF	783,035	2.546	07/01/2013	783,035		1	2.546	783,035	SYST0022	70022	783,035
Union Bank of Calif	UBOC	22,752	0.002	07/01/2013	22,752		1	0.002	22,752	SYST0023	70023	22,752
Federal Home Loan Ba	UBOC	500,000	2.450	12/20/2018	493,773	06/21/2019	51	2.515	498,295	313384HDA4	26733	498,265
Federal Home Loan Ba	UBOC	750,000	2.875	11/27/2018	750,045	09/11/2020	499	2.870	754,920	313370US5	26717	750,034
Federal National Mtg	UBOC	1,150,000	1.630	12/20/2018	1,128,369	10/30/2020	548	2.672	1,137,833	3135GORM7	26734	1,132,598
Federal Home Loan Mt	UBOC	1,000,000	3.000	12/18/2018	1,000,000	12/18/2020	597	3.000	1,000,530	3134GSF94	26729	1,000,000
Bank of NY Mellon Co	UBOC	500,000	2.050	04/03/2018	486,105	05/03/2021	733	3.000	494,170	06406FAB9	26570	490,962
Microsoft Corp.	UBOC	500,000	2.375	04/04/2018	492,295	02/12/2022	1,018	2.798	498,570	594918BA1	26574	494,443
Walt Disney Company/	UBOC	500,000	2.450	07/24/2018	487,520	03/04/2022	1,038	3.186	498,190	25468PDQ6	26630	490,179
TD Ameritrade	UBOC	500,000	2.950	04/03/2018	497,200	04/01/2022	1,066	3.100	503,650	87236YAE8	26571	497,955
Home Depot Inc.	UBOC	500,000	2.625	04/04/2018	494,290	06/01/2022	1,127	2.918	501,120	437076BG6	26572	496,766
Public Storage	UBOC	500,000	2.370	04/04/2018	483,705	09/15/2022	1,233	3.161	494,865	74460DAB5	26573	487,644
Visa Inc.	UBOC	250,000	2.800	07/24/2018	246,975	12/14/2022	1,323	3.096	251,725	92826CAC6	26632	247,505
Intel Corp	UBOC	500,000	2.700	06/22/2018	492,300	12/15/2022	1,324	3.070	501,495	468140AM2	26625	493,775
Toyota Motor Credit	UBOC	550,000	2.625	05/09/2018	536,294	01/10/2023	1,350	3.203	549,934	89233P7F7	26598	539,164
Cisco Systems Inc.	UBOC	500,000	2.600	06/22/2018	487,655	02/28/2023	1,399	3.170	500,610	17279RBE1	26624	489,918
Exxon Mobil Corporat	UBOC	500,000	2.726	05/09/2018	492,670	03/01/2023	1,400	3.055	501,450	30231GAR3	26599	494,160
Berkshire Hathaway I	UBOC	500,000	2.750	05/09/2018	490,280	03/15/2023	1,414	3.185	501,345	064670BR8	26596	492,240
United Parcel Servic	UBOC	500,000	2.500	06/22/2018	484,780	04/01/2023	1,431	3.191	497,645	911312BK1	26627	487,516
Nike Inc	UBOC	500,000	2.250	05/09/2018	480,350	05/01/2023	1,461	3.108	494,450	654106AC7	26597	484,210
Simon Property Group	UBOC	500,000	2.750	07/24/2018	484,725	06/01/2023	1,492	3.438	498,975	828807DD6	26631	487,147
Federal Home Loan Mt	UBOC	2,600,000	2.750	08/17/2018	2,603,900	06/15/2023	1,506	3.467	2,613,676	3134GSMY8	26653	2,603,330
Pfizer Inc	UBOC	500,000	3.000	06/22/2018	496,550	06/15/2023	1,506	3.150	506,730	717081DH3	26626	497,145
Federal Home Loan Mt	UBOC	2,500,000	3.050	06/28/2018	2,501,250	08/28/2023	1,580	3.039	2,514,225	3134GSUZ6	26654	2,501,081
Federal Home Loan Ba	UBOC	2,000,000	3.100	12/28/2018	2,000,000	12/28/2023	1,702	3.100	2,014,060	3130AFKR7	26736	2,000,000
Federal Home Loan Mt	UBOC	2,500,000	2.875	02/28/2019	2,500,000	02/28/2024	1,764	2.875	2,502,350	3134GS3G8	26759	2,500,000

04/30/2019

SCPA Balancing Account

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Federal Home Loan Mt	UBOC	2,000,000	2.760	04/01/2019	2,000,000	04/01/2024	1,797	2.760	2,000,460	3134GS7J8	26797	2,000,000
Federal Home Loan Mt	UBOC	2,000,000	2.650	04/01/2019	2,000,000	04/01/2024	1,797	2.853	2,001,800	3134GS7H2	26798	2,000,000
Federal Home Loan Mt	UBOC	2,180,000	2.700	04/30/2019	2,180,000	04/30/2024	1,826	2.700	2,177,798	3134GTCC4	26799	2,180,000
Fund Total and Average												
		\$ 27,785,787	2.712		\$ 27,596,818		1382	2.983	\$ 27,816,658			\$ 27,640,824

General Operating Reserve

Local Agency Investm	LAIF	15,622,878	2.546	07/01/2013	15,622,878		1	2.546	15,622,878	YSY70000	70002	15,622,878
California Asset Mgm	CMP	5,062,984	2.640	12/14/2018	5,062,984		1	2.640	5,062,984	YSY70071	70071	5,062,984
Union Bank of Califo	UBOC	541	0.002	07/01/2013	541		1	0.002	541	YSY70019	70019	541
US Bank	UBOC	0	0.000	07/01/2013	0		1	0.000	0	YSY70051	70051	0
Federal National Mtg	UBOC	2,000,000	1.750	08/28/2015	2,026,240	11/26/2019	209	1.430	1,992,120	3135GZYZ	26246	2,003,520
Federal Farm Credit	UBOC	4,285,000	1.440	07/20/2016	4,280,715	01/19/2021	629	1.463	4,220,768	3133EGMP7	26356	4,283,364
Federal Home Loan Ba	UBOC	9,720,000	1.400	07/19/2016	9,715,140	01/19/2021	629	1.411	9,566,618	3130A8P80	26354	9,718,146
Federal National Mtg	UBOC	5,162,000	1.625	05/25/2016	5,162,000	05/25/2021	755	1.625	5,073,317	3136G3NL5	26332	5,162,000
Federal National Mtg	UBOC	1,300,000	1.500	08/30/2016	1,300,000	05/28/2021	758	1.500	1,275,027	3136G33W3	26368	1,300,000
Federal Farm Credit	UBOC	10,629,000	1.690	06/02/2016	10,629,000	06/02/2021	763	1.690	10,491,567	3133EGDHS	26335	10,629,000
Federal Home Loan Mt	UBOC	467,000	2.200	01/30/2017	467,000	01/26/2022	1,001	2.200	465,179	3134GAV92	26402	467,000
Microsoft Corp.	UBOC	400,000	2.375	04/26/2018	391,480	02/12/2022	1,018	2.972	398,856	594918BA1	26578	393,757
TD Ameritrade	UBOC	500,000	2.950	04/26/2018	492,950	04/01/2022	1,066	3.335	503,650	87238YAE8	26582	494,769
Apple Inc.	UBOC	4,025,452	2.300	02/01/2018	4,020,538	05/11/2022	1,106	2.329	3,994,698	037833CQ1	26524	4,021,974
Federal Home Loan Ba	UBOC	3,575,000	2.125	08/28/2017	3,634,560	08/10/2022	1,136	1.760	3,556,374	313379Q69	26467	3,613,703
PepsiCo Inc.	UBOC	500,000	3.100	04/26/2018	500,310	07/17/2022	1,173	3.083	508,305	713448CX4	26580	500,236
Walt Disney Company/	UBOC	500,000	2.350	01/30/2019	489,400	12/01/2022	1,310	2.937	495,305	25468PCW4	26739	490,098
Visa Inc.	UBOC	500,000	2.800	04/26/2018	492,600	12/14/2022	1,323	3.145	503,450	92826CAC6	26584	494,219
US Bank, N.A.	UBOC	750,000	2.850	01/30/2019	741,900	01/23/2023	1,363	3.140	752,978	90331HNL3	26737	742,414
Bank of NY Mellon Co	UBOC	500,000	2.950	04/26/2018	491,790	01/29/2023	1,369	3.325	501,950	06406RAE7	26575	493,539
Oracle Corp.	UBOC	500,000	2.625	04/26/2018	487,350	02/15/2023	1,386	3.195	498,275	68389XBR5	26579	490,020
Praxair Inc	UBOC	500,000	2.700	04/26/2018	488,350	02/21/2023	1,392	3.225	500,115	74005PBF0	26581	490,801
Berkshire Hathaway I	UBOC	500,000	2.750	04/26/2018	488,920	03/15/2023	1,414	3.243	501,345	084670BR8	26576	491,219
United Parcel Servc	UBOC	500,000	2.500	04/26/2018	483,135	04/01/2023	1,431	3.245	497,645	911312BK1	26583	486,603
Chevron Corp.	UBOC	750,000	2.566	01/30/2019	738,750	05/16/2023	1,476	2.939	746,678	166764BK5	26740	739,412
Boeing Co.	UBOC	500,000	1.875	01/30/2019	477,500	06/15/2023	1,506	2.979	478,625	097023BQ7	26741	478,800
Chevron Corp.	UBOC	500,000	3.191	02/07/2019	507,025	06/24/2023	1,515	2.847	510,095	166764AH3	26755	506,651
Walmart, Inc.	UBOC	500,000	3.400	02/07/2019	510,960	06/26/2023	1,517	2.864	513,720	931142EK5	26758	510,377
Pfizer Inc	UBOC	500,000	3.200	01/30/2019	506,250	09/15/2023	1,598	2.908	509,710	717081EN9	26738	505,908
Federal Farm Credit	UBOC	1,000,000	3.340	11/21/2018	1,000,000	10/04/2023	1,617	3.339	1,003,150	3133EJES9	26715	1,000,000
Citibank NA	UBOC	500,000	3.650	02/07/2019	507,490	01/23/2024	1,728	3.319	514,650	17325FA57	26756	507,138
JP Morgan	UBOC	500,000	3.875	02/07/2019	515,120	02/01/2024	1,737	3.595	520,315	46625HJ78	26757	514,412
HSBC USA INC	UBOC	1,700,000	3.000	02/20/2019	1,700,000	02/20/2024	1,756	3.503	1,697,824	40435UGC2	26754	1,700,000
Federal Home Loan Mt	UBOC	500,000	2.700	04/30/2019	500,000	04/30/2024	1,826	2.700	499,495	3134GTCC4	26816	500,000

Northern California Power Agency
Treasurer's Report

04/30/2019

General Operating Reserve

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
	Fund Total and Average	\$ 74,449,855	2.141		\$ 74,432,876		671	2.161	\$ 73,979,207			\$ 74,415,483
	GRAND TOTALS:	\$ 194,110,016	2.210		\$ 193,558,924		645	2.313	\$ 193,442,673.			\$ 193,615,886

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 04/30/2019

Investment #26332	FNMA	Callable quarterly	FHLMC	Investment #26653	Callable on 6/15/2020
Investment #26335	FFCB	Callable anytime	FFCB	Investment #26714	Callable on 10/4/2019
Investment #26354	FHLB	Callable anytime	FHLMC	Investment #26715	Callable on 10/4/2019
Investment #26355	FFCB	Callable anytime	FHLB	Investment #26729	Callable quarterly starting 6/18/2019
Investment #26356	FNMA	Callable quarterly	HSBC	Investment #26736	Callable on 12/28/2020
Investment #26368	FHLMC	Callable quarterly	FHLMC	Investment #26754	Callable on 2/20/2020
Investment #26385	FHLMC	Callable quarterly	FHLMC	Investment #26797	Callable on 4/01/2020
Investment #26402	FHLMC	Callable quarterly	FHLMC	Investment #26798	Callable on 4/01/2020
Investment #26403	FHLMC	Callable quarterly	FHLMC	Investment #26799	Callable on 4/30/2020
Investment #26646	USB	Callable on 6/23/2023	FHLMC	Investment #26816	Callable on 4/30/2020



Northern California Power Agency
Treasurer's Report
04/30/2019

GEO 2012 Construction Fund

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Federal Home Loan Mt	USB	895,000	2.400	01/11/2019	888,377	05/02/2019	1	2.451	894,937	313396FB4	26743	894,940
Fund Total and Average		\$ 895,000	2.400		\$ 888,377		1	2.451	\$ 894,937			\$ 894,940

Geothermal Debt Service

Federal Home Loan Mt	USBT	236,000	2.385	02/12/2019	233,889	06/27/2019	57	2.439	235,098	313396HK2A	26762	235,109
Federal Home Loan Ba	USBT	235,000	2.399	04/30/2019	234,076	06/28/2019	58	2.442	234,088	313384HL6A	26800	234,091
Federal Home Loan Ba	USBT	1,359,000	2.410	01/11/2019	1,343,443	07/01/2019	61	2.471	1,353,455	313384HP7A	26744	1,353,450
Federal Home Loan Ba	USBT	236,000	2.405	03/19/2019	234,360	07/01/2019	61	2.455	235,037	313384HP7A	26775	235,038
Federal Home Loan Ba	USBT	235,000	2.415	03/28/2019	233,502	07/01/2019	61	2.464	234,041	313384HP7A	26776	234,038
Fund Total and Average		\$ 2,301,000	2.406		\$ 2,279,270		60	2.463	\$ 2,291,719			\$ 2,291,726

GEO 2012A Debt Service

Federal Home Loan Mt	USBT	127,000	2.385	02/12/2019	125,864	06/27/2019	57	2.439	126,515	313396HK2A	26763	126,520
Federal Home Loan Ba	USBT	123,000	2.400	04/30/2019	122,516	06/28/2019	58	2.442	122,523	313384HL6A	26801	122,524
Federal Home Loan Ba	USBT	123,000	2.405	03/19/2019	122,145	07/01/2019	61	2.455	122,498	313384HP7A	26777	122,499
Federal Home Loan Ba	USBT	124,000	2.415	03/28/2019	123,210	07/01/2019	61	2.464	123,494	313384HP7A	26778	123,493
Fund Total and Average		\$ 497,000	2.401		\$ 493,735		59	2.451	\$ 495,030			\$ 495,036

GEO 2016A Debt Service

Federal Home Loan Mt	USBT	55,000	2.385	02/12/2019	54,508	06/27/2019	57	2.439	54,790	313396HK2A	26764	54,792
U.S. Treasury	USBT	55,000	2.325	03/19/2019	54,645	06/27/2019	57	2.372	54,793	912796RV3	26779	54,798
U.S. Treasury	USBT	54,000	2.320	03/28/2019	53,683	06/27/2019	57	2.366	53,797	912796RV3	26780	53,802
U.S. Treasury	USBT	55,000	2.328	04/30/2019	54,794	06/27/2019	57	2.369	54,793	912796RV3	26802	54,797
Federal Home Loan Ba	USBT	188,000	2.410	01/11/2019	185,848	07/01/2019	61	2.471	187,233	313384HP7A	26745	187,232
Fund Total and Average		\$ 407,000	2.372		\$ 403,478		59	2.426	\$ 405,406			\$ 405,421

Geothermal Special Reserve

Union Bank of Califlo	UBOC	0	0.002	07/01/2013	0		1	0.002	0	SYS70015	70015	0
Federal Home Loan Mt	UBOC	1,500,000	3.000	12/18/2018	1,500,000	12/18/2020	597	3.000	1,500,795	3134GSF34	26730	1,500,000
Fund Total and Average		\$ 1,500,000	3.000		\$ 1,500,000		597	3.000	\$ 1,500,795			\$ 1,500,000

GEO Decommissioning Reserve

Local Agency Investm	LAIF	6,743	2.546	07/01/2013	6,743		1	2.546	6,743	SYS70027	70027	6,743
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04/30/2019

Geo Decommissioning Reserve

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Union Bank of Calif	UBOC	12,473	0.002	07/01/2013	12,473		1	0.002	12,473	SYS70034	70034	12,473
American Honda Finan	UBOC	500,000	2.650	11/30/2018	493,500	02/12/2021	653	3.265	500,080	02665WCD1	26726	494,739
Toyota Motor Credit	UBOC	500,000	2.950	11/30/2018	496,300	04/13/2021	713	3.276	503,490	89236TEUS	26727	496,955
Federal National Mtg	UBOC	2,000,000	1.500	08/30/2016	2,000,000	05/28/2021	788	1.500	1,961,580	3136G33W3	26389	2,000,000
Ally Bank	UBOC	250,000	3.000	08/30/2018	250,000	08/30/2021	852	3.002	252,718	02007GEQ2A	30312	250,000
PNC Bank NA	UBOC	750,000	2.550	03/15/2018	735,450	12/09/2021	983	3.103	748,193	69353REY0	26553	739,845
Federal Home Loan Mt	UBOC	1,000,000	3.150	12/20/2018	1,000,000	12/20/2021	964	3.150	1,000,880	3134GSH40	26735	1,000,000
Federal Home Loan Mt	UBOC	941,000	2.200	01/30/2017	941,000	01/28/2022	1,001	2.200	937,330	3134GAV92	26404	941,000
Apple Inc.	UBOC	861,211	2.300	11/29/2017	860,117	05/11/2022	1,106	2.329	854,631	037833CQ1	26499	860,467
Wells Fargo Bank	UBOC	250,000	3.150	08/30/2018	250,000	08/30/2022	1,217	3.154	253,208	949763TLOA	30311	250,000
Great North Bank	UBOC	250,000	3.050	08/31/2018	250,000	08/31/2022	1,218	3.051	253,078	39103QAF3A	30310	250,000
Discover Bank	UBOC	250,000	3.150	09/06/2018	250,000	09/06/2022	1,224	3.152	253,855	254673TW8A	30313	250,000
Walt Disney Company/	UBOC	750,000	2.350	03/15/2018	728,580	12/01/2022	1,310	3.004	742,958	25468PCW4	26551	733,708
John Deere Capital C	UBOC	750,000	2.800	03/15/2018	739,748	01/27/2023	1,367	3.104	751,215	24422ERT8	26550	742,123
Bank of NY Mellon Co	UBOC	750,000	2.950	03/15/2018	740,610	01/29/2023	1,369	3.229	752,925	06408RAE7	26549	742,784
IBM Credit LLC	UBOC	500,000	3.000	03/15/2018	496,820	02/06/2023	1,377	3.140	502,265	44932HAH6	26548	497,553
Enerbank USA	UBOC	250,000	3.200	08/30/2018	250,000	08/30/2023	1,582	3.203	254,250	29278TCP3A	30309	250,000
Citibank NA	UBOC	250,000	3.300	09/07/2018	250,000	09/07/2023	1,590	3.301	255,248	17312QS34A	30314	250,000
Federal Farm Credit	UBOC	1,000,000	3.340	11/21/2018	1,000,000	10/04/2023	1,617	3.339	1,003,150	3133EJE39	26716	1,000,000
Federal Home Loan Mt	UBOC	1,000,000	3.500	12/18/2018	1,000,000	12/18/2023	1,692	3.500	1,000,730	3134GSF26	26732	1,000,000
Federal Home Loan Mt	UBOC	1,000,000	2.760	04/01/2019	1,000,000	04/01/2024	1,797	2.760	1,000,230	3134GS7J8	26817	1,000,000
Federal Home Loan Mt	UBOC	2,000,000	2.650	04/01/2019	2,000,000	04/01/2024	1,797	2.853	2,001,800	3134GS7H2	26818	2,000,000
Federal Home Loan Mt	UBOC	1,960,000	2.700	04/30/2019	1,960,000	04/30/2024	1,826	2.700	1,958,020	3134GTCQ4	26819	1,960,000
Federal Farm Credit	UBOC	2,000,000	3.450	07/27/2018	1,999,300	07/23/2025	2,275	3.455	2,028,780	3133EJUT4	26644	1,999,376
Fund Total and Average		\$ 19,781,427	2.746		\$ 19,710,641		1429	2.863	\$ 19,789,830			\$ 19,727,766

GEO Debt Service Reserve Acct

Federal Home Loan Mt	USBT	907,000	1.750	06/02/2015	920,886	05/30/2019	29	1.354	906,501	3137EADG1	26228	907,280
U.S. Treasury	USB	40,000	2.273	10/17/2018	38,379	06/20/2019	50	2.333	39,868	912796QW4	26692	39,874
Federal Home Loan Mt	USBT	2,515,000	1.250	02/27/2015	2,483,839	10/02/2019	154	1.530	2,502,274	3137EADM8	26197	2,512,157
Fund Total and Average		\$ 3,462,000	1.393		\$ 3,444,104		120	1.493	\$ 3,448,643			\$ 3,459,311

Geo 2012A DSR Account

U.S. Treasury	USB	12,000	2.394	10/17/2018	11,714	10/10/2019	162	2.472	11,872	912796RF8	26693	11,871
Federal National Mtg	USBT	1,517,000	1.625	05/25/2016	1,517,000	05/25/2021	755	1.625	1,490,938	3136G3NL5	26333	1,517,000
Fund Total and Average		\$ 1,529,000	1.631		\$ 1,528,714		750	1.632	\$ 1,502,810			\$ 1,528,871

GRAND TOTALS: \$ 30,372,427 2,501 \$ 30,248,319 1017 2,596 \$ 30,329,170. \$ 30,303,071

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 04/30/2019

- Investment #26333 FNMA Callable quarterly
- Investment #26369 FNMA Callable quarterly
- Investment #26404 FHLMC Callable quarterly
- Investment #26644 FFCB Callable anytime starting 7/23/2021
- Investment #26716 FFCB Callable on 10/4/2019
- Investment #26730 FHLMC Callable quarterly starting 6/18/2019
- Investment #26732 FHLMC Callable quarterly starting 6/18/2019
- Investment #26735 FHLMC Callable quarterly starting 6/20/2019
- Investment #26817 FHLMC Callable on 4/01/2020
- Investment #26818 FHLMC Callable on 4/01/2020
- Investment #26819 FHLMC Callable on 4/30/2020



Northern California Power Agency
Treasurer's Report

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Cap Facilities Debt Service

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Federal Home Loan Ba	USBT	479,000	2.400	04/30/2019	476,318	07/23/2019	83	2.447	476,337	313384JM2	26810	476,350
U.S. Treasury	USBT	2,133,000	2.390	02/12/2019	2,109,918	07/25/2019	85	2.449	2,121,098	912796SA8	26768	2,120,963
Federal Home Loan Ba	USBT	481,000	2.410	03/19/2019	476,653	08/01/2019	92	2.465	478,037	313384JWO	26785	478,038
Federal Home Loan Ba	USBT	480,000	2.380	03/28/2019	476,002	08/01/2019	92	2.433	477,043	313384JWO	26786	477,081
Fund Total and Average		\$ 3,573,000	2.393		\$ 3,538,891		87	2.449	\$ 3,552,515			\$ 3,552,432

Cap. Fac. Debt Svc Reserve

U.S. Treasury	USB	36,000	2.397	10/17/2018	35,142	10/10/2019	162	2.475	35,615	912796RF8	26697	35,612
Federal National Mtg	USB	71,000	1.530	07/28/2016	71,000	07/28/2021	819	1.530	69,830	313663SS97	26358	71,000
Federal Home Loan Mt	USB	1,443,000	2.375	02/13/2012	1,447,430	01/13/2022	988	2.340	1,446,001	3137EADB2	25845	1,444,206
Fund Total and Average		\$ 1,550,000	2.337		\$ 1,553,572		961	2.306	\$ 1,551,446			\$ 1,550,818
GRAND TOTALS:		\$ 5,123,000	2.376		\$ 5,092,463		352	2.406	\$ 5,103,961.			\$ 5,103,250

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.
Current Market Value is based on prices from Trustee/ Custodian Statements or bid prices from the Wall Street Journal as of 04/30/2019
Investment #26358 FNMA Callable quarterly



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Capital Dev. Reserve Hydro

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Local Agency Investm	LAIF	3,890,798	2.546	07/01/2013	3,890,798		1	2.546	3,890,798	SYST0028	70028	3,890,798
Union Bank of Calif	UBOC	1,122,124	0.002	07/01/2013	1,122,124		1	0.002	1,122,124	SYST0031	70031	1,122,124
Branch Banking & Tru	UBOC	500,000	2.625	06/13/2018	488,420	01/15/2022	990	3.314	500,255	07330NAQ8	26618	491,270
Exxon Mobil Corporat	UBOC	500,000	2.397	06/13/2018	490,350	03/06/2022	1,040	2.946	499,065	30231GAJ1	26621	492,635
US Bank	UBOC	550,000	3.000	08/10/2018	546,607	03/15/2022	1,049	3.182	554,318	91159HHG7	26651	547,290
Public Storage	UBOC	500,000	2.370	03/14/2018	485,770	09/15/2022	1,233	3.051	494,865	74460DAB5	26546	489,343
Visa Inc.	UBOC	500,000	2.800	03/14/2018	494,470	12/14/2022	1,323	3.051	503,450	9282CA06	26547	495,786
Toyota Motor Credit	UBOC	500,000	2.700	06/13/2018	489,100	01/11/2023	1,351	3.215	498,510	89238TEL5	26619	491,203
Oracle Corp.	UBOC	500,000	2.625	03/14/2018	488,715	02/15/2023	1,386	3.121	498,275	68389XBR5	26545	491,308
Boeing Co.	UBOC	500,000	2.800	03/14/2018	496,070	03/01/2023	1,400	2.971	498,720	097023BW4	26544	496,965
United Parcel Servic	UBOC	500,000	2.500	06/13/2018	484,900	04/01/2023	1,431	3.182	497,645	911312BK1	26620	487,679
Colgate-Palmolive Co	UBOC	550,000	2.100	08/09/2018	528,660	05/01/2023	1,461	2.985	537,851	19419QEC0	26652	531,945
Federal Home Loan Ba	UBOC	1,150,000	3.050	08/08/2018	1,145,113	06/13/2023	1,504	3.144	1,150,426	3130AEEJ5	26649	1,145,849
Federal Home Loan Ba	UBOC	1,500,000	3.250	10/19/2018	1,500,000	10/19/2023	1,632	3.250	1,513,950	3130AERY5	26701	1,500,000
Federal Home Loan Ba	UBOC	2,000,000	3.100	01/29/2019	2,000,000	01/29/2024	1,734	3.100	2,003,780	3130AFRR0	26742	2,000,000
Fund Total and Average		\$ 14,762,922	2.554		\$ 14,651,097		963	2.736	\$ 14,765,032			\$ 14,674,195

Hydro Initial Facilities

Federal Home Loan Ba	USBT	1,693,000	2.360	04/04/2019	1,683,233	07/01/2019	61	2.406	1,686,083	313384HP7A	26604	1,686,230
Federal Farm Credit	USB	2,464,000	2.540	02/12/2019	2,464,493	02/12/2020	287	2.519	2,467,228	3133EKAF3	26761	2,464,385
Fund Total and Average		\$ 4,157,000	2.467		\$ 4,147,726		195	2.474	\$ 4,153,321			\$ 4,150,615

Hydro Debt Service

Federal Home Loan Mt	USBT	1,804,000	2.385	02/12/2019	1,787,865	06/27/2019	57	2.439	1,797,109	313396HK2A	26765	1,797,188
Federal Home Loan Ba	USBT	846,000	2.400	04/30/2019	842,672	06/28/2019	58	2.442	842,718	313384HL6A	26805	842,729
Federal Home Loan Ba	USBT	3,292,000	2.360	04/04/2019	3,273,009	07/01/2019	61	2.406	3,278,569	313384HP7A	26803	3,278,836
Fund Total and Average		\$ 5,942,000	2.373		\$ 5,903,546		69	2.422	\$ 5,918,396			\$ 5,918,753

Hydro 2018A Debt Service

Federal Home Loan Mt	USBT	1,037,000	2.385	02/12/2019	1,027,725	06/27/2019	57	2.439	1,033,039	313396HK2A	26766	1,033,084
Federal Home Loan Ba	USBT	630,000	2.395	04/30/2019	627,527	06/28/2019	58	2.437	627,556	313384HL6A	26806	627,569
Federal Home Loan Ba	USBT	401,000	2.400	04/30/2019	399,423	06/28/2019	58	2.442	399,444	313384HL6A	26807	399,449
Federal Home Loan Ba	USBT	4,523,000	2.410	01/11/2019	4,471,223	07/01/2019	61	2.471	4,504,546	313384HP7A	26747	4,504,530
Federal Home Loan Ba	USBT	1,035,000	2.405	03/19/2019	1,027,809	07/01/2019	61	2.455	1,030,777	313384HP7A	26781	1,030,782
Federal Home Loan Ba	USBT	1,034,000	2.415	03/28/2019	1,027,410	07/01/2019	61	2.464	1,029,761	313384HP7A	26782	1,029,769

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Hydro 2018A Debt Service

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Fund Total and Average		\$ 8,660,000	2.405		\$ 8,581,117		60	2.461	\$ 8,625,143			\$ 8,625,183
Hydro 2018B Debt Service												
Federal Home Loan Mt	USBT	116,000	2.385	02/12/2019	114,963	06/27/2019	57	2.439	115,557	313396HK2A	26767	115,562
Federal Home Loan Ba	USBT	115,000	2.399	04/30/2019	114,548	06/28/2019	58	2.442	114,554	313384HL6A	26808	114,555
Federal Home Loan Ba	USBT	688,000	2.410	01/11/2019	680,124	07/01/2019	61	2.471	685,193	313384HP7A	26748	685,190
Federal Home Loan Ba	USBT	115,000	2.405	03/19/2019	114,201	07/01/2019	61	2.455	114,531	313384HP7A	26783	114,531
Federal Home Loan Ba	USBT	115,000	2.415	03/28/2019	114,267	07/01/2019	61	2.464	114,531	313384HP7A	26784	114,529
Fund Total and Average		\$ 1,149,000	2.406		\$ 1,138,103		60	2.463	\$ 1,144,366			\$ 1,144,367

Hydro 2019A Debt Service

Federal Home Loan Ba	USBT	469,000	2.399	04/30/2019	467,155	06/28/2019	58	2.442	467,180	313384HL6A	26809	467,187
Fund Total and Average		\$ 469,000	2.400		\$ 467,155		58	2.443	\$ 467,180			\$ 467,187

Hydro 2012A Rebate Account

Federal Home Loan Mt	USB	689,000	1.875	04/28/2017	691,391	08/09/2021	831	1.790	680,691	3134G93A3	26432	690,269
Fund Total and Average		\$ 689,000	1.875		\$ 691,391		831	1.790	\$ 680,691			\$ 690,269

Hydro Special Reserve

Local Agency Investm	LAIF	0	0.377	07/01/2013	0		1	0.377	0	SYS70000	70003	0
Union Bank of Calif	UBOC	0	0.002	07/01/2013	0		1	0.002	0	SYS70016	70016	0
Federal Home Loan Mt	UBOC	1,500,000	3.000	12/18/2018	1,500,000	12/18/2020	597	3.000	1,500,795	3134GSF34	26731	1,500,000
Fund Total and Average		\$ 1,500,000	3.000		\$ 1,500,000		597	3.000	\$ 1,500,795			\$ 1,500,000

Hydro 2012 Cost of Issuance

US Bank	USB	0	0.040	07/01/2013	0		1	0.040	0	SYS79061	79061	0
Fund Total and Average		\$ 0	***.***		\$ 0		***	***.***	\$ 0			\$ 0

Hydro 2012 DSRA

Federal Farm Credit	USB	100,000	1.750	08/28/2015	100,329	08/04/2020	461	1.680	99,258	3133EE529	26244	100,084
U.S. Treasury	USB	146,000	2.250	02/27/2018	145,992	02/15/2021	656	2.251	145,874	912828X6	26539	145,995
Federal National Mtg	USB	94,000	1.530	07/28/2016	94,000	07/28/2021	819	1.530	92,451	3136G3S97	26359	94,000
Federal Home Loan Mt	USB	3,928,000	2.375	02/09/2012	3,926,232	01/13/2022	988	2.380	3,936,170	3137EADB2	25862	3,927,519

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Hydro 2012 DSRA

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
	Fund Total and Average	\$ 4,288,000	2.337		\$ 4,266,553		961	2.340	\$ 4,273,753			\$ 4,267,598
	GRAND TOTALS:	\$ 41,596,922	2.465		\$ 41,346,688		515	2.550	\$ 41,528,677.			\$ 41,438,167

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/Custodian Statements or bid prices from the Wall Street Journal as of 04/30/2019

- Investment #26359 FNMA Callable quarterly
- Investment #26649 FHLB Callable on 6/13/2019
- Investment #26701 FHLB Callable until 10/19/2020
- Investment #26731 FHLMC Callable quarterly starting 6/18/2019
- Investment #26742 FHLB Callable quarterly



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LEC GHG Auction Acct

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Local Agency Investim		74,169	2.546	07/01/2013	74,169		1	2.546	74,169	YSY70046	70046	74,169
Fund Total and Average		\$ 74,169	2.546		\$ 74,169		1	2.546	\$ 74,169			\$ 74,169
LEC Issue#1 2010A DS Fund												
US Bank Trust	USB	732	0.600	07/01/2013	732		1	0.600	732	YSY79003	79003	732
Federal Home Loan Mt	USBT	4,310,000	2.405	01/11/2019	4,270,265	05/29/2019	28	2.461	4,301,940	313396GE7A	26749	4,301,938
Federal Home Loan Ba	USBT	421,000	2.405	03/19/2019	418,975	05/30/2019	29	2.450	420,183	313384GFO	26787	420,184
Federal Home Loan Ba	USBT	423,000	2.395	02/12/2019	419,961	05/31/2019	30	2.445	422,150	313384GG8A	26769	422,156
Federal Home Loan Ba	USBT	420,000	2.410	03/28/2019	418,116	06/03/2019	33	2.454	419,072	313384GK9A	26788	419,072
Federal Home Loan Ba	USBT	420,000	2.395	04/30/2019	419,050	06/03/2019	33	2.433	419,072	313384GK9A	26811	419,078
Fund Total and Average		\$ 5,994,732	2.404		\$ 5,947,099		29	2.457	\$ 5,983,149			\$ 5,983,160

LEC Issue #1 2010B DS Fund

US Bank Trust	USB	672	0.600	07/01/2013	672		1	0.600	672	YSY79004	79004	672
Federal Home Loan Mt	USBT	761,000	2.405	01/11/2019	753,984	05/29/2019	28	2.461	759,577	313396GE7A	26750	759,577
Federal Home Loan Ba	USBT	728,000	2.405	03/19/2019	724,498	05/30/2019	29	2.450	726,588	313384GFO	26789	726,590
Federal Home Loan Ba	USBT	718,000	2.410	03/28/2019	714,972	05/30/2019	29	2.453	716,607	313384GFO	26790	716,606
Federal Home Loan Ba	USBT	730,000	2.395	02/12/2019	724,755	05/31/2019	30	2.445	728,533	313384GG8A	26770	728,543
Federal Home Loan Ba	USBT	736,000	2.394	04/30/2019	734,335	06/03/2019	33	2.433	734,373	313384GK9A	26812	734,384
Fund Total and Average		\$ 3,673,672	2.402		\$ 3,653,216		30	2.449	\$ 3,666,350			\$ 3,666,372

LEC Issue #2 2010A DS Fund

US Bank Trust	USB	591	0.600	07/01/2013	591		1	0.600	591	YSY79011	79011	591
Federal Home Loan Mt	USBT	2,918,000	2.405	01/11/2019	2,891,098	05/29/2019	28	2.461	2,912,543	313396GE7A	26751	2,912,542
Federal Home Loan Ba	USBT	436,000	2.405	03/19/2019	433,903	05/30/2019	29	2.450	435,154	313384GFO	26791	435,155
Federal Home Loan Ba	USBT	436,000	2.410	03/28/2019	434,161	05/30/2019	29	2.453	435,154	313384GFO	26796	435,154
Federal Home Loan Ba	USBT	438,000	2.395	02/12/2019	434,853	05/31/2019	30	2.445	437,120	313384GG8A	26771	437,126
Federal Home Loan Ba	USBT	435,000	2.395	04/30/2019	434,016	06/03/2019	33	2.433	434,039	313384GK9A	26813	434,045
Fund Total and Average		\$ 4,663,591	2.403		\$ 4,628,622		29	2.455	\$ 4,654,601			\$ 4,654,613

LEC Issue #2 2010B DS Fund

US Bank Trust	USB	290	0.600	07/01/2013	290		1	0.600	290	YSY79012	79012	290
Federal Home Loan Mt	USBT	366,000	2.405	01/11/2019	362,626	05/29/2019	28	2.461	365,316	313396GE7A	26752	365,315
Federal Home Loan Ba	USBT	350,000	2.405	03/19/2019	348,317	05/30/2019	29	2.450	349,321	313384GFO	26792	349,322

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LEC Issue #2 2010B DS Fund

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Federal Home Loan Ba	USBT	350,000	2.410	09/28/2019	348,524	05/30/2019	29	2.453	349,321	313384GFO	26793	349,321
Federal Home Loan Ba	USBT	350,000	2.395	02/12/2019	347,485	05/31/2019	30	2.445	349,297	313384G8A	26772	349,301
Federal Home Loan Ba	USBT	349,000	2.395	04/30/2019	348,211	06/03/2019	33	2.433	348,229	313384GK9A	26814	348,234
Fund Total and Average												
		\$ 1,765,290	2.402		\$ 1,755,453		30	2.449	\$ 1,761,774			\$ 1,761,783

LEC Issue#1 2017A DS Fund

Federal Home Loan Mt	USBT	432,000	2.405	01/11/2019	428,017	05/29/2019	28	2.461	431,192	313396GE7A	26753	431,192
Federal Home Loan Ba	USBT	124,000	2.405	03/19/2019	123,404	05/30/2019	29	2.450	123,759	313384GFO	26794	123,760
Federal Home Loan Ba	USBT	124,000	2.410	03/28/2019	123,477	05/30/2019	29	2.453	123,759	313384GFO	26795	123,759
Federal Home Loan Ba	USBT	125,000	2.395	02/12/2019	124,102	05/31/2019	30	2.445	124,749	313384G8A	26773	124,751
Federal Home Loan Ba	USBT	124,000	2.394	04/30/2019	123,720	06/03/2019	33	2.453	123,726	313384GK9A	26815	123,728
Fund Total and Average												
		\$ 929,000	2.403		\$ 922,720		29	2.453	\$ 927,185			\$ 927,190

LEC Issue #1 2010 DSR Fund

US Bank Trust	USB	164,246	0.600	07/01/2013	164,246		1	0.600	164,246	SYS79005	79005	164,246
U.S. Treasury	USB	85,000	1.625	02/27/2018	84,641	06/30/2019	60	1.945	84,883	912828WSS	26538	84,956
Federal Farm Credit	USB	4,360,000	1.660	06/08/2016	4,360,000	05/25/2021	755	1.659	4,301,532	3133EGBZ7	26337	4,360,000
Federal Home Loan Mt	USB	150,000	1.125	07/28/2017	146,648	08/12/2021	634	1.699	146,150	3137EAECS	26454	148,107
Federal Home Loan Ba	USB	4,100,000	2.125	08/28/2017	4,168,306	06/10/2022	1,136	1.760	4,078,639	313379Q69	26463	4,144,387
Fund Total and Average												
		\$ 8,859,246	1.848		\$ 8,823,841		913	1.690	\$ 8,775,450			\$ 8,901,696

LEC Iss#1 2010B BABS Subs Resv

US Bank Trust	USB	111,508	0.600	07/01/2013	111,508		1	0.600	111,508	SYS79006	79006	111,508
Federal Home Loan Ba	USB	2,145,000	3.375	07/28/2017	2,255,146	06/12/2020	408	1.540	2,169,045	313370E38	26465	2,187,716
Fund Total and Average												
		\$ 2,256,508	3.240		\$ 2,366,654		388	1.494	\$ 2,280,553			\$ 2,299,224

LEC Issue #2 2010B DSR BABS

US Bank Trust	USB	70,896	0.600	07/01/2013	70,896		1	0.600	70,896	SYS79013	79013	70,896
Federal Home Loan Ba	USB	1,025,000	4.375	07/28/2017	1,082,708	07/01/2019	61	1.400	1,028,239	3133XU3G6	26466	1,029,996
Fund Total and Average												
		\$ 1,095,896	4.132		\$ 1,153,604		57	1.348	\$ 1,099,135			\$ 1,100,892

LEC O & M Reserve

Local Agency Investm		293,725	2.546	07/01/2013	293,725		1	2.546	293,725	SYS70047	70047	293,725
Union Bank of Califo	UBOC	561,113	0.002	07/18/2013	561,113		1	0.002	561,113	SYS70041	70041	561,113
Federal Home Loan Ba	USB	3,615,000	1.540	06/30/2017	3,613,952	06/05/2020	401	1.550	3,582,357	3130ABJQ0	26440	3,614,608



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LEC O & M Reserve

Issuer	Trustee / Custodian	Stated Value	Interest Rate	Purchase Date	Purchased Price	Maturity Date	Days to Maturity	Bond* Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
Federal National Mtg	UBOC	3,000,000	1.300	06/30/2016	3,000,000	06/30/2020	426	1.300	2,961,750	3136G3UJ2	26341	3,000,000
Federal Home Loan Mt	UBOC	2,500,000	2.800	03/20/2019	2,500,000	03/20/2024	1,785	2.980	2,501,875	3134GS5R2	26774	2,500,000
Fund Total and Average		\$ 9,969,838	1.727		\$ 9,968,790		721	1.778	\$ 9,900,820			\$ 9,969,446
GRAND TOTALS:		\$ 39,281,942	2.204		\$ 39,394,168		426	2.023	\$ 39,123,186.			\$ 39,338,545

*Bond Equivalent Yield to Maturity is shown based on a 365 day year to provide a basis for comparison between all types. Investments with less than 6 months to maturity use an approximate method, all others use an exact method.

Current Market Value is based on prices from Trustee/Custodian Statements or bid prices from the Wall Street Journal as of 04/30/2019
Investment #26337 FFCB Callable anytime



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Commission Staff Report

Date: May 14, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: KSB, Inc. – Five Year Multi-Task General Services Agreement for pump maintenance related services; Applicable to the following projects: All NCPA Facility Locations, Members, SCPPA, and SCPPA Members

AGENDA CATEGORY: Consent

FROM:	Ken Speer <i>K/S</i>	METHOD OF SELECTION:
	Assistant General Manager	N/A
Division:	Generation Services	<i>If other, please describe:</i>
Department:	Combustion Turbines	

IMPACTED MEMBERS:					
All Members	<input checked="" type="checkbox"/>	City of Lodi	<input type="checkbox"/>	City of Shasta Lake	<input type="checkbox"/>
Alameda Municipal Power	<input type="checkbox"/>	City of Lompoc	<input type="checkbox"/>	City of Ukiah	<input type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Palo Alto	<input type="checkbox"/>	Plumas-Sierra REC	<input type="checkbox"/>
City of Biggs	<input type="checkbox"/>	City of Redding	<input type="checkbox"/>	Port of Oakland	<input type="checkbox"/>
City of Gridley	<input type="checkbox"/>	City of Roseville	<input type="checkbox"/>	Truckee Donner PUD	<input type="checkbox"/>
City of Healdsburg	<input type="checkbox"/>	City of Santa Clara	<input type="checkbox"/>	Other	<input type="checkbox"/>
<i>If other, please specify</i>					

RECOMMENDATION:

Approval of Resolution 19-39 authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with KSB, Inc. for pump maintenance related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000.00 over five years, for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (“SCPPA”), or by SCPPA Members.

BACKGROUND:

Pump maintenance related services are required from time to time related to project support at facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (“SCPPA”), or by SCPPA Members.

FISCAL IMPACT:

Upon execution, the total cost of the agreement is not to exceed \$1,000,000.00 over five years, to be used out of the NCPA approved budget. Purchase orders referencing the terms and conditions of the Agreement will be issued following NCPA procurement policies and procedures.

SELECTION PROCESS:

This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are required, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA has agreements in place with Ethos Energy and Sulzer Turbo for similar services and seeks bids from multiple qualified providers whenever services are needed. Bids are awarded to the lowest cost provider. NCPA will issue purchase orders based on cost and availability of the services needed at the time the service is required.

ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

The recommendation above was reviewed by the Facilities Committee on May 1, 2019 and was recommended for Commission approval on Consent Calendar.

The recommendation above was reviewed by the Lodi Energy Center Project Participant Committee on May 6, 2019 and was approved.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Randy S. Howard".

RANDY S. HOWARD
General Manager

Attachments (2):

- Resolution
- Multi-Task General Services Agreement with KSB, Inc.

RESOLUTION 19-39

**RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY
APPROVING A MULTI-TASK GENERAL SERVICES AGREEMENT WITH KSB, INC.**

(reference Staff Report #153:19)

WHEREAS, pump maintenance related services are periodically required at the facilities owned and/or operated by Northern California Power Agency (NCPA), its Members, the Southern California Public Power Authority (SCPPA), and SCPPA Members; and

WHEREAS, KSB, Inc. is a provider of these services; and

WHEREAS, NCPA seeks to enter into a Multi-Task General Services Agreement with KSB, Inc. to provide such services as needed at all NCPA Generation facility locations, Member, SCPPA, and SCPPA Member facilities in an amount not to exceed \$1,000,000 over five years; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to enter into a Multi-Task General Services Agreement with KSB, Inc. with any non-substantial changes as approved by the NCPA General Counsel, which shall not exceed \$1,000,000 for pump maintenance related services for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (SCPPA), or by SCPPA Members.

PASSED, ADOPTED and APPROVED this ____ day of _____, 2019 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

ROGER FRITH
CHAIR

ATTEST:

CARY A. PADGETT
ASSISTANT SECRETARY



**MULTI-TASK
GENERAL SERVICES AGREEMENT BETWEEN
THE NORTHERN CALIFORNIA POWER AGENCY AND
KSB, INC.**

This Multi-Task General Services Agreement ("Agreement") is made by and between the Northern California Power Agency, a joint powers agency with its main office located at 651 Commerce Drive, Roseville, CA 95678-6420 ("Agency") and KSB, Inc., a New York corporation with an office located at 19234 Flightpath Way, Bakersfield, CA 93308 ("Contractor") (together sometimes referred to as the "Parties" and individually as a "Party") as of _____, 2019 ("Effective Date") in Roseville, California.

Section 1. SCOPE OF WORK. Subject to the terms and conditions set forth in this Agreement, Contractor is willing to provide to Agency the range of services (the "Services") and/or goods (the "Goods") described in the Scope of Work attached hereto as Exhibit A and incorporated herein ("Work").

- 1.1 Term of Agreement.** The term of this Agreement shall begin on the Effective Date and shall end when Contractor completes the Work, or no later than five (5) years from the date this Agreement was signed by Agency, whichever is longer.
- 1.2 Standard of Performance.** Contractor shall perform the Work in the manner and according to the standards observed by a competent practitioner of the profession in which Contractor is engaged and for which Contractor is providing the Work. Contractor represents that it is licensed, qualified and experienced to provide the Work set forth herein.
- 1.3 Assignment of Personnel.** Contractor shall assign only competent personnel to perform the Work. In the event that Agency, in its sole discretion, at any time during the term of this Agreement, requests the reassignment of any such personnel, Contractor shall, immediately upon receiving written notice from Agency of such request, reassign such personnel.
- 1.4 Work Provided.** Work provided under this Agreement by Contractor may include Work directly to the Agency or, as requested by the Agency and consistent with the terms of this Agreement, to Agency members, Southern California Public Power Authority ("SCPPA") or SCPPA members.
- 1.5 Request for Work to be Performed.** At such time that Agency, SCPPA, or any Agency or SCPPA member determines to have Contractor perform Work under this Agreement, Agency shall issue a Purchase Order. The Purchase Order shall identify the specific Work to be performed ("Requested Work"), may include a not-to-exceed cap on monetary cap on Requested Work and all related expenditures authorized by that Purchase Order, and shall include a time by which the Requested Work shall be completed. Contractor shall have seven (7) business days from the date of the Agency's issuance of the Purchase Order in which to respond in writing that Contractor chooses to perform the Requested

Work. If Contractor agrees to perform the Requested Work it shall acknowledge its agreement in writing within the seven day period specified, and Contractor will have agreed to perform the Requested Work on the terms set forth in the Purchase Order, this Agreement and its Exhibits.

Section 2. COMPENSATION. Agency hereby agrees to pay Contractor an amount **NOT TO EXCEED ONE MILLION** dollars (\$1,000,000.00) for the Work per Purchase Order, which shall include all fees, costs, expenses and other reimbursables, as set forth in Contractor's fee schedule, attached hereto and incorporated herein as Exhibit B. This dollar amount is not a guarantee that Agency will pay that full amount to the Contractor, but is merely a limit of potential Agency expenditures under any Purchase Order issued under this Agreement.

2.1 Invoices. Contractor shall submit invoices, not more often than once a month during the term of this Agreement, based on the Work performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:

- The beginning and ending dates of the billing period;
- Work performed;
- The Purchase Order number authorizing the Requested Work;
- At Agency's option, for each work item in each task, a copy of the applicable time entries or time sheets shall be submitted showing the name of the person doing the work, the hours spent by each person, a brief description of the work, and each reimbursable expense, with supporting documentation, to Agency's reasonable satisfaction;
- At Agency's option, the total number of hours of work performed under the Agreement by Contractor and each employee, agent, and subcontractor of Contractor performing work hereunder.

Invoices shall be sent to:

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678
Attn: Accounts Payable
AcctsPayable@ncpa.com

2.2 Monthly Payment. Agency shall make monthly payments, based on invoices received, for Work satisfactorily performed, and for authorized reimbursable costs incurred. Agency shall have thirty (30) days from the receipt of an invoice that complies with all of the requirements above to pay Contractor.

2.3 Payment of Taxes. Contractor is solely responsible for the payment of all federal, state and local taxes, including employment taxes for its personnel, it incurs for Work performed under this Agreement.

2.4 Authorization to Perform Work. The Contractor is not authorized to perform any Work or incur any costs whatsoever under the terms of this Agreement until receipt of a Purchase Order from the Contract Administrator.

2.5 Timing for Submittal of Final Invoice. Contractor shall have ninety (90) days after completion of the Requested Work to submit its final invoice for the Requested Work. In the event Contractor fails to submit an invoice to Agency for any amounts due within the ninety (90) day period, Contractor is deemed to have waived its right to collect its final payment for the Requested Work from Agency.

Section 3. FACILITIES AND EQUIPMENT. As agreed per Purchase Order, Contractor shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the Work.

Section 4. INSURANCE REQUIREMENTS. Before beginning any Work under this Agreement, Contractor, at its own cost and expense, shall procure the types and amounts of insurance listed below and shall maintain the types and amounts of insurance listed below for the period covered by this Agreement.

4.1 Workers' Compensation. If Contractor employs any person, Contractor shall maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Contractor with limits of not less than one million dollars (\$1,000,000.00) per accident.

4.2 Commercial General and Automobile Liability Insurance.

4.2.1 Commercial General Insurance. Contractor shall maintain commercial general liability insurance for the term of this Agreement, including products liability, covering any loss or liability, including the cost of defense of any action, for bodily injury, death, personal injury and broad form property damage which may arise out of the operations of Contractor. The policy shall provide a minimum limit of \$1,000,000 per occurrence/\$2,000,000 aggregate. Commercial general coverage shall be at least as broad as ISO Commercial General Liability form CG 0001 (current edition) on "an occurrence" basis covering comprehensive General Liability, with a self-insured retention or deductible of no more than \$100,000. No endorsement shall be attached limiting the coverage.

4.2.2 Automobile Liability. Contractor shall maintain automobile liability insurance form CA 0001 (current edition) for the term of this Agreement covering any loss or liability, including the cost of defense of any action, arising from the operation, maintenance or use of any vehicle (symbol 1), whether or not owned by the Contractor, on or off Agency premises. The policy shall provide a minimum limit of \$1,000,000 per each accident, with a self-insured retention or deductible of no more than \$100,000. This insurance shall provide contractual liability covering all motor vehicles and mobile equipment to the extent coverage may be excluded from general liability insurance.

- 4.2.3 General Liability/Umbrella Insurance.** The coverage amounts set forth above may be met by a combination of underlying and umbrella policies as long as in combination the limits equal or exceed those stated.
- 4.3 Professional Liability Insurance.** Not Applicable.
- 4.4 Pollution Insurance.** Not Applicable.
- 4.5 All Policies Requirements.**
- 4.5.1 Verification of coverage.** Prior to beginning any work under this Agreement, Contractor shall provide Agency with (1) a Certificate of Insurance that demonstrates compliance with all applicable insurance provisions contained herein and (2) policy endorsements to the policies referenced in Section 4.2 and in Section 4.4, if applicable, adding the Agency as an additional insured and declaring such insurance primary in regard to work performed pursuant to this Agreement.
- 4.5.2 Notice of Reduction in or Cancellation of Coverage.** Contractor shall provide at least thirty (30) days prior written notice to Agency of any reduction in scope or amount, cancellation, or modification adverse to Agency of the policies referenced in Section 4.
- 4.5.3 Higher Limits.** If Contractor maintains higher limits than the minimums specified herein, the Agency shall be entitled to coverage for the higher limits maintained by the Contractor.
- 4.5.4 Additional Certificates and Endorsements.** If Contractor performs Work for Agency members, SCPPA and/or SCPPA members pursuant to this Agreement, Contractor shall provide the certificates of insurance and policy endorsements, as referenced in Section 4.5.1, naming the specific Agency member, SCPPA and/or SCPPA member for which the Work is to be performed.
- 4.5.5 Waiver of Subrogation.** Contractor agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. In addition, the Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of Agency for all work performed by Contractor, its employees, agents and subcontractors.
- 4.6 Contractor's Obligation.** Contractor shall be solely responsible for ensuring that all equipment, vehicles and other items utilized in the performance of Work are operated, provided or otherwise utilized in a manner that ensures they are and remain covered by the policies referenced in Section 4 during this Agreement. Contractor shall also ensure that all its workers involved in the provision of Work are properly classified as employees, agents or independent

contractors and are and remain covered by any and all workers' compensation insurance required by applicable law during this Agreement.

Section 5. INDEMNIFICATION AND CONTRACTOR'S RESPONSIBILITIES.

- 5.1 Effect of Insurance.** Agency's acceptance of insurance certificates and endorsements required under this Agreement does not relieve Contractor from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Agreement, Contractor acknowledges and agrees to the provisions of this section and that it is a material element of consideration.
- 5.2 Scope.** Contractor shall indemnify, defend with counsel reasonably acceptable to the Agency, and hold harmless the Agency, and its officials, commissioners, officers, employees, agents and volunteers from and against all losses, liabilities, claims, demands, suits, actions, damages, expenses, penalties, fines, costs (including without limitation costs and fees of litigation), judgments and causes of action of every nature arising out of or in connection with any acts or omissions by Contractor, its officers, officials, agents, and employees, except as caused by the sole or gross negligence of Agency. Notwithstanding, should this Agreement be construed as a construction agreement under Civil Code section 2783, then the exception referenced above shall also be for the active negligence of Agency.
- 5.3 Transfer of Title.** Not Applicable.

Section 6. STATUS OF CONTRACTOR.

- 6.1 Independent Contractor.** Contractor is an independent contractor and not an employee of Agency. Agency shall have the right to control Contractor only insofar as the results of Contractor's Work and assignment of personnel pursuant to Section 1; otherwise, Agency shall not have the right to control the means by which Contractor accomplishes Work rendered pursuant to this Agreement. Notwithstanding any other Agency, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Contractor and any of its employees, agents, and subcontractors performing Work under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by Agency, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of Agency and entitlement to any contribution to be paid by Agency for employer contributions and/or employee contributions for PERS benefits.

Contractor shall indemnify, defend, and hold harmless Agency for the payment of any employee and/or employer contributions for PERS benefits on behalf of Contractor or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of Agency. Contractor and Agency acknowledge

and agree that compensation paid by Agency to Contractor under this Agreement is based upon Contractor's estimated costs of providing the Work, including salaries and benefits of employees, agents and subcontractors of Contractor.

Contractor shall indemnify, defend, and hold harmless Agency from any lawsuit, administrative action, or other claim for penalties, losses, costs, damages, expense and liability of every kind, nature and description that arise out of, pertain to, or relate to such claims, whether directly or indirectly, due to Contractor's failure to secure workers' compensation insurance as required by law for its employees, agents, or subcontractors related to their performance of the Work under this Agreement.

Contractor agrees that it is responsible for the provision of group healthcare benefits to its fulltime employees under 26 U.S.C. § 4980H of the Affordable Care Act, as amended (the "Act"). To the extent permitted by law, Contractor shall indemnify, defend and hold harmless Agency from any penalty issued to Agency under the Affordable Care Act resulting from Contractor's violation of the its obligations under the Act related to its performance of the Services by any employee, agent, or subcontractor of Contractor.

- 6.2 Contractor Not Agent.** Except as Agency may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of Agency in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, pursuant to this Agreement to bind Agency to any obligation whatsoever.
- 6.3 Assignment and Subcontracting.** This Agreement contemplates personal performance by Contractor and is based upon a determination of Contractor's unique professional competence, experience, and specialized professional knowledge. A substantial inducement to Agency for entering into this Agreement was and is the personal reputation and competence of Contractor. Contractor may not assign this Agreement or any interest therein without the prior written approval of the Agency. Contractor shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors identified in Exhibit A, without prior written approval of the Agency. Where written approval is granted by the Agency, Contractor shall supervise all work subcontracted by Contractor in performing the Work and shall be responsible for all work performed by a subcontractor as if Contractor itself had performed such work. The subcontracting of any work to subcontractors shall not relieve Contractor from any of its obligations under this Agreement with respect to the Work and Contractor is obligated to ensure that any and all subcontractors performing any Work shall be fully insured in all respects and to the same extent as set forth under Section 4, to Agency's satisfaction.
- 6.4 Certification as to California Energy Commission.** If requested by the Agency, Contractor shall, at the same time it executes this Agreement, execute Exhibit C.

- 6.5 Certification as to California Energy Commission Regarding Hazardous Materials Transport Vendors.** If requested by the Agency, Contractor shall, at the same time it executes this Agreement, execute Exhibit D.
- 6.6 Maintenance Labor Agreement.** If the Work is subject to the terms of one or more Maintenance Labor Agreements, which are applicable only to certain types of construction, repair and/or maintenance projects, then Contractor shall execute Exhibit E and/or similar documentation as to compliance.

Section 7. LEGAL REQUIREMENTS.

- 7.1 Governing Law.** The laws of the State of California shall govern this Agreement.
- 7.2 Compliance with Applicable Laws.** Contractor and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 Licenses and Permits.** Contractor represents and warrants to Agency that Contractor and its employees, agents, and subcontractors (if any) have and will maintain at their sole expense during the term of this Agreement all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice their respective professions.
- 7.4 Monitoring by DIR.** The Work is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
- 7.5 Registration with DIR.** During the term of this Agreement, Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform Work consistent with Labor Code section 1725.5.
- 7.6 Prevailing Wage Rates.** In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work as provided in the California Labor Code must be paid to all workers engaged in performing the Work. In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for the locality in which the Work is to be performed; the Agency has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the Work is to be performed for each craft, classification or type of worker needed to perform the project; and copies of the prevailing rate of per diem wages are on file at the Agency and will be made available on request. Throughout the performance of the Work, Contractor must comply with all applicable laws and regulations that apply to wages earned in performance of the Work. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the Agency harmless from any and all claims made by the

State of California, the Department of Industrial Relations, any subcontractor, any worker or any other third party with regard thereto.

Additionally, in accordance with the California Administrative Code, Title 8, Group 3, Article 2, Section 16000, Publication of Prevailing Wage Rates by Awarding Bodies, copies of the applicable determination of the Director can be found on the web at: <http://www.dir.ca.gov/DLSR/PWD/> and may be reviewed at any time.

Contractor shall be required to submit to the Agency during the contract period, copies of Public Works payroll reporting information per California Department of Industrial Relations, Form A- 1-131 (New 2-80) concerning work performed under this Agreement.

Contractor shall comply with applicable law, including Labor Code Sections 1774 and 1775. In accordance with Section 1775, Contractor shall forfeit as a penalty to Agency \$50.00 for each calendar day or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of Industrial Relations for such work or craft in which such worker is employed for any Work done under the Agreement by Contractor or by any subcontractor under Contractor in violation of the provisions of the Labor Code and in particular, Labor Code Sections 1770 *et seq.* In addition to the penalty and pursuant to Section 1775, the difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor.

Section 8. TERMINATION AND MODIFICATION.

8.1 Termination. Agency may cancel this Agreement at any time and without cause upon ten (10) days prior written notice to Contractor.

In the event of termination, Contractor shall be entitled to compensation for Work satisfactorily completed as of the effective date of termination; Agency, however, may condition payment of such compensation upon Contractor delivering to Agency any or all records or documents (as referenced in Section 9.1 hereof).

8.2 Amendments. The Parties may amend this Agreement only by a writing signed by both of the Parties.

8.3 Survival. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between Agency and Contractor shall survive the termination of this Agreement.

8.4 Options upon Breach by Contractor. If, after written notice from Agency and a reasonable opportunity to commence to cure a breach of a material term, Contractor breaches any of the material terms of this Agreement, including but not limited to failure to procure and maintain insurance as required in Section 4, Agency's remedies shall include, but not be limited to, the following:

- 8.4.1 Immediately terminate the Agreement;
- 8.4.2 Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Contractor pursuant to a Purchase Order under this Agreement;
- 8.4.3 Retain a different Contractor to complete the Work not finished by Contractor pursuant to a Purchase Order; and/or
- 8.4.4 Charge Contractor the difference between the direct out of pocket costs to complete the Work that is unfinished at the time of breach and the amount that Agency would have paid Contractor pursuant hereto if Contractor had completed the Work.

Section 9. KEEPING AND STATUS OF RECORDS.

- 9.1 **Records Created as Part of Contractor's Performance.** All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Contractor prepares as part of or obtains pursuant to this Agreement and that relate are prepared or directly pertain to the matters covered hereunder shall be the property of the Agency. Contractor hereby agrees to deliver those documents to the Agency upon termination of the Agreement. Agency and Contractor agree that, unless approved by Agency in writing, Contractor shall not release to any non-parties to this Agreement any data, plans, specifications, reports and other documents.
- 9.2 **Contractor's Books and Records.** Contractor shall maintain any and all records or other documents evidencing or relating to charges for Work or expenditures and disbursements charged to the Agency under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Contractor under this Agreement.
- 9.3 **Inspection and Audit of Records.** Any records or documents that this Agreement requires Contractor to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of the Agency. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars (\$10,000.00), the Agreement shall be subject to the examination and audit of the State Auditor, at the request of Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under this Agreement.
- 9.4 **Confidential Information and Disclosure.**
 - 9.4.1 **Confidential Information.** The term "Confidential Information", as used herein, shall mean any and all confidential, proprietary, or trade secret

information, whether written, recorded, electronic, oral or otherwise, where the Confidential Information is made available in a tangible medium of expression and marked in a prominent location as confidential, proprietary and/or trade secret information. Confidential Information shall not include information that: (a) was already known to the Receiving Party or is otherwise a matter of public knowledge, (b) was disclosed to Receiving Party by a third party without violating any confidentiality agreement, (c) was independently developed by Receiving Party without reverse engineering, as evidenced by written records thereof, or (d) was not marked as Confidential Information in accordance with this section.

9.4.2 Non-Disclosure of Confidential Information. During the term of this Agreement, either party may disclose (the “Disclosing Party”) Confidential Information to the other party (the “Receiving Party”). The Receiving Party: (a) shall hold the Disclosing Party's Confidential Information in confidence; and (b) shall take all reasonable steps to prevent any unauthorized possession, use, copying, transfer or disclosure of such Confidential Information.

9.4.3 Permitted Disclosure. Notwithstanding the foregoing, the following disclosures of Confidential Information are allowed. Receiving Party shall endeavor to provide prior written notice to Disclosing Party of any permitted disclosure made pursuant to Section 9.4.3.2 or 9.4.3.3. Disclosing Party may seek a protective order, including without limitation, a temporary restraining order to prevent or contest such permitted disclosure; provided, however, that Disclosing Party shall seek such remedies at its sole expense. Neither party shall have any liability for such permitted disclosures:

9.4.3.1 Disclosure to employees, agents, contractors, subcontractors or other representatives of Receiving Party that have a need to know in connection with this Agreement.

9.4.3.2 Disclosure in response to a valid order of a court, government or regulatory agency or as may otherwise be required by law; and

9.4.3.3 Disclosure by Agency in response to a request pursuant to the California Public Records Act.

9.4.4 Handling of Confidential Information. Upon conclusion or termination of the Agreement, Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof), if requested by Disclosing Party in writing. Notwithstanding the foregoing, the Receiving Party may retain copies of such Confidential Information, subject to the confidentiality provisions of this Agreement: (a) for archival purposes in its computer system; (b) in its legal department files; and (c) in files of Receiving Party's representatives where such copies are necessary to comply with applicable law. Party shall not disclose the

Disclosing Party's Information to any person other than those of the Receiving Party's employees, agents, consultants, contractors and subcontractors who have a need to know in connection with this Agreement.

Section 10. PROJECT SITE.

- 10.1 Operations at the Project Site.** Each Project site may include the power plant areas, all buildings, offices, and other locations where Work is to be performed, including any access roads. Contractor shall perform the Work in such a manner as to cause a minimum of interference with the operations of the Agency; if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4; and other contractors at the Project site and to protect all persons and property thereon from damage or injury. Upon completion of the Work at a Project site, Contractor shall leave such Project site clean and free of all tools, equipment, waste materials and rubbish, stemming from or relating to Contractor's Work.
- 10.2 Contractor's Equipment, Tools, Supplies and Materials.** Contractor shall be solely responsible for the transportation, loading and unloading, and storage of any equipment, tools, supplies or materials required for performing the Work, whether owned, leased or rented. Neither Agency nor, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, will be responsible for any such equipment, supplies or materials which may be lost, stolen or damaged or for any additional rental charges for such. Equipment, tools, supplies and materials left or stored at a Project site, with or without permission, is at Contractor's sole risk. Anything left on the Project site an unreasonable length of time after the Work is completed shall be presumed to have been abandoned by the Contractor. Any transportation furnished by Agency or, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, shall be solely as an accommodation and neither Agency nor, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, shall have liability therefor. Contractor shall assume the risk and is solely responsible for its owned, non-owned and hired automobiles, trucks or other motorized vehicles as well as any equipment, tools, supplies, materials or other property which is utilized by Contractor on the Project site. All materials and supplies used by Contractor in the Work shall be new and in good condition.
- 10.3 Use of Agency Equipment.** Contractor shall assume the risk and is solely responsible for its use of any equipment owned and property provided by Agency and, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, for the performance of Work.

Section 11. WARRANTY.

11.1 Nature of Work.

- 11.1.1** Subject to its limitation of liability, Contractor warrants that all Goods supplied by Contractor as part of the Work shall be free from defects in design (except to the extent that any design is specified by Agency), materials and workmanship as specified under 11.2.1 below, and
- 11.1.2** Subject to its limitation of liability, Contractor warrants that all Services performed by Contractor as part of the Work shall be performed in a good and workmanlike manner as specified under 11.2.1.2 below; and
- 11.1.3** Contractor shall perform all Work in accordance with applicable federal, state, and local laws, rules and regulations including engineering, construction and other codes and standards and prudent electrical utility standards, and in accordance with the terms of this Agreement.

11.2 Deficiencies in Work.

- 11.2.1** If, for a period of twelve (12) months from the date of placing Goods in operation or eighteen (18) months from the date of initial shipment, whichever shall occur first, any equipment, supplies or other materials used or provided by Contractor under this Agreement fails due to defects in material and/or workmanship, Contractor shall, upon any reasonable written notice from Agency but within the 12 or 18 month period, replace or repair the same at Contractor's option. The warranty period for repaired or replaced Goods shall extend for a period of twelve (12) months beyond the date the repair or replacement work is completed or to the end of the original warranty period, whichever occurs later. Contractor will not be liable for any repairs, replacements, or adjustments to the Goods performed by Agency or any party hired by Agency. Contractor shall be responsible for any direct, out of pocket costs incurred by Agency and including time spent by Agency personnel to affect such repairs, replacements or adjustments to the Goods performed. Any such work on Goods done by Agency or by third parties without pre-approval by Contractor shall be at Agency's cost and expense and shall void Contractor's Warranty under this Paragraph 11.2.1.
 - 11.2.1.2** If, for a period of thirty (30) days following completion of the Service performed under a Purchase Order, any Service fails due to defect in Services warranty as described under 11.1.2 above, Contractor shall upon any reasonable written notice from Agency but within the 30 day period re-perform the Service.

11.2.2 The effects of corrosion, erosion and normal wear and tear are specifically excluded from Contractor's Warranty. Contractor makes no performance warranty unless specifically stated within its proposal. In the event performance warranties are expressly included, .

11.3 **Assignment of Warranties.** Contractor hereby assigns to Agency all additional warranties, extended warranties, or benefits like warranties, such as insurance, provided by or reasonably obtainable from suppliers of equipment and material used in the Work.

11.4 **THE WARRANTIES MADE HEREIN BY CONTRACTOR ARE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED BY AGENCY OR ANY ENTITY ISSUING A PURCHASE ORDER UNDER THIS AGREEMENT. CONTRACTOR DISCLAIMS ANY AND ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

Section 12. HEALTH AND SAFETY PROGRAMS. The Contractor shall establish, maintain, and enforce safe work practices, and implement an accident/incident prevention program intended to ensure safe and healthful operations under their direction. The program shall include all requisite components of such a program under Federal, State and local regulations and shall comply with all site programs established by Agency and, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4.

12.1 Contractor is responsible for acquiring job hazard assessments as necessary to safely perform the Work and provide a copy to Agency upon request.

12.2 Contractor is responsible for providing all employee health and safety training and personal protective equipment in accordance with potential hazards that may be encountered in performance of the Work and provide copies of the certified training records upon request by Agency. Contractor shall be responsible for proper maintenance and/or disposal of their personal protective equipment and material handling equipment.

12.3 Contractor is responsible for ensuring that its lower-tier subcontractors are aware of and will comply with the requirements set forth herein.

12.4 Agency, or its representatives, may periodically monitor the safety performance of the Contractor performing the Work. Contractors and its subcontractors shall be required to comply with the safety and health obligations as established in the Agreement. Non-compliance with safety, health, or fire requirements may result in cessation of work activities, until items in non-compliance are corrected. It is also expressly acknowledged, understood and agreed that no payment shall be due from Agency to Contractor under this Agreement at any time when, or for any Work performed when, Contractor is not in full compliance with this Section 12.

12.5 Contractor shall immediately report any injuries to the Agency site safety representative. Additionally, the Contractor shall investigate and submit to the

Agency site safety representative copies of all written accident reports, and coordinate with Agency if further investigation is requested.

- 12.6** Contractor shall take all reasonable steps and precautions to protect the health of its employees and other site personnel with regard to the Work. Contractor shall conduct occupational health monitoring and/or sampling to determine levels of exposure of its employees to hazardous or toxic substances or environmental conditions. Copies of any sampling results will be forwarded to the Agency site safety representative upon request.
- 12.7** Contractor shall develop a plan to properly handle and dispose of any hazardous wastes, if any, Contractor generates in performing the Work.
- 12.8** Contractor shall advise its employees and subcontractors that any employee who jeopardizes his/her safety and health, or the safety and health of others, may be subject to actions including removal from Work.
- 12.9** Contractor shall, at the sole option of the Agency, develop and provide to the Agency a Hazardous Material Spill Response Plan that includes provisions for spill containment and clean-up, emergency contact information including regulatory agencies and spill sampling and analysis procedures. Hazardous Materials shall include diesel fuel used for trucks owned or leased by the Contractor.
- 12.10** If Contractor is providing Work to an Agency Member, SCPPA or SCPPA member (collectively "Member" solely for the purpose of this section) pursuant to Section 1.4 hereof, then that Member shall have the same rights as the Agency under Sections 12.1, 12.2, 12.4, 12.5, and 12.6 hereof.

Section 13. MISCELLANEOUS PROVISIONS.

- 13.1** **Attorneys' Fees.** If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.
- 13.2** **Venue.** In the event that either party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Placer or in the United States District Court for the Eastern District of California.
- 13.3** **Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

- 13.4 No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.
- 13.5 Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the Parties.
- 13.6 Conflict of Interest.** Contractor may serve other clients, but none whose activities within the corporate limits of Agency or whose business, regardless of location, would place Contractor in a “conflict of interest,” as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Contractor shall not employ any Agency official in the work performed pursuant to this Agreement. No officer or employee of Agency shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.*

- 13.7 Contract Administrator.** This Agreement shall be administered by Ken Speer, Assistant General Manager, or his/her designee, who shall act as the Agency's representative. All correspondence shall be directed to or through the representative.

- 13.8 Notices.** Any written notice to Contractor shall be sent to:

KSB, Inc.
Attention: Dean Brown, General Manager
19234 Flightpath Way
Bakersfield, CA 93308

With a copy to:

KSB, Inc.
Attention: Audrey Schumacher Turner, Regional Legal Counsel –KSB North America
4415 Sarellen Road
Henrico, VA 23231

Any written notice to Agency shall be sent to:

Randy S. Howard
General Manager
Northern California Power Agency
651 Commerce Drive
Roseville, CA 95678

With a copy to:

Jane E. Luckhardt
General Counsel
Northern California Power Agency
651 Commerce Drive
Roseville, CA 95678

- 13.9 Professional Seal.** Where applicable in the determination of the Agency, the first page of a technical report, first page of design specifications, and each page of construction drawings shall be stamped/sealed and signed by the licensed professional responsible for the report/design preparation.
- 13.10 Integration; Incorporation.** This Agreement, including all the exhibits attached hereto, represents the entire and integrated agreement between Agency and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral. All exhibits attached hereto are incorporated by reference herein.
- 13.11 Alternative Dispute Resolution.** If any dispute arises between the Parties that cannot be settled after engaging in good faith negotiations, Agency and Contractor agree to resolve the dispute in accordance with the following:
- 13.11.1** Each party shall designate a senior management or executive level representative to negotiate any dispute;
- 13.11.2** The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.
- 13.11.3** If the issue remains unresolved after fifteen (15) business days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiation between legal counsel. If the above process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.
- 13.11.4** The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.
- 13.11.5** The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.
- 13.11.6** The alternative dispute resolution process is a material condition to this Agreement and must be exhausted as an administrative remedy prior to either Party initiating legal action. This alternative dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 *et seq.*

13.12 Controlling Provisions. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, a Purchase Order, or Contractor's Proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and a Purchase Order or the Contractor's Proposal, the Exhibits shall control. In the case of any conflict between the terms of a Purchase Order and the Contractor's Proposal, the Purchase Order shall control.

13.13 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.

13.14 Construction of Agreement. Each party hereto has had an equivalent opportunity to participate in the drafting of the Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting party shall not apply hereto.

13.15 No Third Party Beneficiaries. This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties. However, should Contractor provide Work to an Agency member, SCPPA or SCPPA member (collectively for the purpose of this section only "Member") pursuant to Section 1.4, the parties recognize that such Member may be a third party beneficiary solely as to the Purchase Order and Requested Work relating to such Member.

13.16 Limitation of Liability.

IN NO EVENT SHALL SELLER BE LIABLE-WHETHER OR AS A RESULT OF BREACH OF CONTRACT OR WARRANTY OR BY WAY OF INDEMNITY OR OTHERWISE- FOR ANY LOSS OF REVENUE, LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COSTS OF CAPITAL, COMMERCIAL LOSS, COSTS CONNECTED WITH THE INTERRUPTION OF OPERATION, OR ANY FURTHER SPECIAL, INDIRECT, CONSEQUENTIAL, OR PUNITIVE DAMAGE.

Signatures on the Next Page

The Parties have executed this Agreement as of the date signed by the Agency.

NORTHERN CALIFORNIA POWER AGENCY

KSB, INC.

Date _____

Date _____

RANDY S. HOWARD,
General Manager

Dean Brown,
General Manager

Attest:

Assistant Secretary of the Commission

Approved as to Form:

Jane E. Luckhardt, General Counsel

EXHIBIT A SCOPE OF WORK

KSB, Inc. ("Contractor") shall provide pump maintenance related services related to project support and plant operations as requested by the Northern California Power Agency ("Agency") at any Facilities owned or operated by NCPA, its Members, Southern California Public Power Authority (SCPPA) or SCPPA members.

Services to include, but not be limited to the following:

- Pump Maintenance
- Mechanical Seal Maintenance
- Metal Fabrication
- Rotating Equipment Balancing
- Equipment Cleaning

No project under this Agreement shall include Work that would qualify as a Public Works Project under the California Public Contract Code.

**EXHIBIT B
COMPENSATION SCHEDULE AND HOURLY FEES**

Compensation for all work, including hourly fees and expenses, shall not exceed the amount set forth in Section 2 hereof. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

2018 Service Rates

		Industry Standard Rate	API/Engineered Product
Hourly Rates	A. Shop & Field Technician Labor Rate		
	1. Overtimes applies to all labor in excess of eight up to twelve (8-12) (Monday – Friday) and Saturday up to twelve hours.		
	2. Double-time applies to all labor hours in excess of twelve (12) hours in one day, all work hours on Sunday and holidays; twelve hours maximum.	\$90.00 / person	\$145/ person
	3. Normal operating hours are 7:00 am – 3:30 pm , Monday – Friday		
	4. Pump Shop requires two staff members after hours		
	B. Machine Shop Labor Rate		
	Machine Shop requires two staff members after hours (See 1,2,3,4)	\$90.00 / person	\$145/person
	C. Technical Field Advisor Rate		
	(See 1,2,3,4)	\$208.00 / Person	\$208.00 / Person
	D. Quality Control or Safety Supervisor Rate		
	(See 1,2,3,4)	\$130.00 / person	\$130.00 / person
Expenses	E. Travel Time Rate		
	(including portal to portal) and Standby Time will include the applicable rates shown above	See (A, B, C, D)	See (A, B, C, D)
	F. Holdover Time Rate		
	Charged time for Field Service Technician covers time (other than service and standby time) spend at jobsite area in lieu of return to point of origin at Customer request and will be billed at stated	\$720.00 / day	\$1160.00 / day
	G. Per Diem		
	Covers meals and incidental expenses associated with being at the job site. Not including are lodging and travel expenses.	\$92.00 / per day	\$92.00 / per day
	H. Public Transportation and Lodging		
At receipted cost plus 18% admin. Expense. Includes, but not limited to, airfare, rental vehicle,	Cost + 18% admin. expense	Cost + 18% admin. expense	
I. Mileage			
Company and personal vehicles	\$0.85/mile	\$0.85/ mile	
J. Miscellaneous			
Includes, but not limited to, freight, postage, printing costs, consumables required to perform tasks	Cost + 18% admin. expense	Cost + 18% admin. expense	
Fees	K. Transportation Charge For Pick-up/Delivery (2 hour Minimum)		
		3.60 per mile + 18% admin. Expense	3.60 per mile + 18% admin. Expense
	L. Laser Alignment		
		\$350.00 / day	\$350.00 / day

** Rate for skilled work shall be at the prevailing rate in effect at the time that work is performed.

All rates are in U.S. funds (dollars) and subject to change without notice.

Rates effective January 5, 2018 and supersede all previously published rates.

Pricing for services to be performed at NCPA Member or SCPPA locations will be quoted at the time services are requested.

NOTE: As a public agency, NCPA shall not reimburse Contractor for travel, food and related costs in excess of those permitted by the Internal Revenue Service.

EXHIBIT C
CERTIFICATION

Affidavit of Compliance for Contractors

I,

(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

KSB, Inc.

(Company name)

for contract work at:

LODI ENERGY CENTER, 12745 N. THORNTON ROAD, LODI, CA 95242

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 _____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

NOT APPLICABLE

EXHIBIT D

CERTIFICATION

Affidavit of Compliance for Hazardous Materials Transport Vendors

I, _____,

(Name of person signing affidavit)(Title)

do hereby certify that the below-named company has prepared and implemented security plans in conformity with 49 CFR 172, subpart I and has conducted employee background investigations in conformity with 49 CFR 172.802(a), as the same may be amended from time to time,

(Company name)

for hazardous materials delivery to:

LODI ENERGY CENTER, 12745 N. THORNTON ROAD, LODI, CA 95242

(Project name and location)

as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 __.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

EXHIBIT E

**ATTACHMENT A [from MLA]
AGREEMENT TO BE BOUND**

**MAINTENANCE LABOR AGREEMENT ATTACHMENT
LODI ENERGY CENTER PROJECT**

The undersigned hereby certifies and agrees that:

- 1) It is an Employer as that term is defined in Section 1.4 of the Lodi Energy Center Project Maintenance Labor Agreement ("Agreement" solely for the purposes of this Exhibit E) because it has been, or will be, awarded a contract or subcontract to assign, award or subcontract Covered Work on the Project (as defined in Section 1.2 and 2.1 of the Agreement), or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.
- 2) In consideration of the award of such contract or subcontract, and in further consideration of the promises made in the Agreement and all attachments thereto (a copy of which was received and is hereby acknowledged), it accepts and agrees to be bound by the terms and condition of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.
- 3) If it performs Covered Work, it will be bound by the legally established trust agreements designated in local master collective bargaining agreements, and hereby authorizes the parties to such local trust agreements to appoint trustees and successor trustee to administer the trust funds, and hereby ratifies and accepts the trustees so appointed as if made by the undersigned.
- 4) It has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of the Agreement.
- 5) It will secure a duly executed Agreement to be Bound, in form identical to this documents, from any Employer(s) at any tier or tiers with which it contracts to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.

DATED: _____ Name of Employer _____

(Authorized Officer & Title)

(Address)



Commission Staff Report

Date: May 14, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: Mechanical Analysis Repair, Inc. dba Martech – Five Year Multi-Task General Services Agreement for machining related services; Applicable to the following projects: All NCPA Facility Locations, Members, SCPA, and SCPA Members

AGENDA CATEGORY: Consent

FROM:	Ken Speer <i>KDS</i>	METHOD OF SELECTION:
	Assistant General Manager	N/A
Division:	Generation Services	<i>If other, please describe:</i>
Department:	Combustion Turbines	

IMPACTED MEMBERS:		
All Members <input checked="" type="checkbox"/>	City of Lodi <input type="checkbox"/>	City of Shasta Lake <input type="checkbox"/>
Alameda Municipal Power <input type="checkbox"/>	City of Lompoc <input type="checkbox"/>	City of Ukiah <input type="checkbox"/>
San Francisco Bay Area Rapid Transit <input type="checkbox"/>	City of Palo Alto <input type="checkbox"/>	Plumas-Sierra REC <input type="checkbox"/>
City of Biggs <input type="checkbox"/>	City of Redding <input type="checkbox"/>	Port of Oakland <input type="checkbox"/>
City of Gridley <input type="checkbox"/>	City of Roseville <input type="checkbox"/>	Truckee Donner PUD <input type="checkbox"/>
City of Healdsburg <input type="checkbox"/>	City of Santa Clara <input type="checkbox"/>	Other <input type="checkbox"/>
<i>If other, please specify</i>		

RECOMMENDATION:

Approval of Resolution 19-40 authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech for machining related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,500,000.00 over five years, for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (“SCPPA”), or by SCPPA Members.

BACKGROUND:

Machining related services are required from time to time related to project support at facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (“SCPPA”), or by SCPPA Members.

FISCAL IMPACT:

Upon execution, the total cost of the agreement is not to exceed \$1,500,000.00 over five years, to be used out of the NCPA approved budget. Purchase orders referencing the terms and conditions of the Agreement will be issued following NCPA procurement policies and procedures.

SELECTION PROCESS:

This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are required, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA has an agreement in place with Bay Valve Service for similar services and seeks bids from multiple qualified providers whenever services are needed. Bids are awarded to the lowest cost provider. NCPA will issue purchase orders based on cost and availability of the services needed at the time the service is required.

ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

The recommendation above was reviewed by the Facilities Committee on May 1, 2019 and was recommended for Commission approval on Consent Calendar.

The recommendation above was reviewed by the Lodi Energy Center Project Participant Committee on May 6, 2019 and was approved.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Randy S. Howard".

RANDY S. HOWARD
General Manager

Attachments (2):

- Resolution
- Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech

RESOLUTION 19-40

**RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY
APPROVING A MULTI-TASK GENERAL SERVICES AGREEMENT WITH MECHANICAL
ANALYSIS REPAIR, INC. DBA MARTECH**

(reference Staff Report #154:19)

WHEREAS, machining related services are periodically required at the facilities owned and/or operated by Northern California Power Agency (NCPA), its Members, the Southern California Public Power Authority (SCPPA), and SCPPA Members; and

WHEREAS, Mechanical Analysis Repair, Inc. dba Martech is a provider of these services; and

WHEREAS, NCPA seeks to enter into a Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech to provide such services as needed at all NCPA Generation facility locations, Member, SCPPA, and SCPPA Member facilities in an amount not to exceed \$1,500,000 over five years; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to enter into a Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech with any non-substantial changes as approved by the NCPA General Counsel, which shall not exceed \$1,500,000 for machining related services for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (SCPPA), or by SCPPA Members.

PASSED, ADOPTED and APPROVED this ____ day of _____, 2019 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

ROGER FRITH
CHAIR

ATTEST:

CARY A. PADGETT
ASSISTANT SECRETARY



**MULTI-TASK
GENERAL SERVICES AGREEMENT BETWEEN
THE NORTHERN CALIFORNIA POWER AGENCY AND
MECHANICAL ANALYSIS REPAIR, INC. DBA MARTECH**

This Multi-Task General Services Agreement ("Agreement") is made by and between the Northern California Power Agency, a joint powers agency with its main office located at 651 Commerce Drive, Roseville, CA 95678-6420 ("Agency") and Mechanical Analysis Repair, Inc. dba Martech, a California corporation with its office located at 142 N. Cluff Avenue, Lodi, CA 95240 ("Contractor") (together sometimes referred to as the "Parties") as of _____, 2019 ("Effective Date") in Roseville, California.

Section 1. SCOPE OF WORK. Subject to the terms and conditions set forth in this Agreement, Contractor is willing to provide to Agency the range of services and/or goods described in the Scope of Work attached hereto as Exhibit A and incorporated herein ("Work").

- 1.1 Term of Agreement.** The term of this Agreement shall begin on the Effective Date and shall end when Contractor completes the Work, or no later than five (5) years from the date this Agreement was signed by Agency, whichever is shorter.
- 1.2 Standard of Performance.** Contractor shall perform the Work in the manner and according to the standards observed by a competent practitioner of the profession in which Contractor is engaged and for which Contractor is providing the Work. Contractor represents that it is licensed, qualified and experienced to provide the Work set forth herein.
- 1.3 Assignment of Personnel.** Contractor shall assign only competent personnel to perform the Work. In the event that Agency, in its sole discretion, at any time during the term of this Agreement, requests the reassignment of any such personnel, Contractor shall, immediately upon receiving written notice from Agency of such request, reassign such personnel.
- 1.4 Work Provided.** Work provided under this Agreement by Contractor may include Work directly to the Agency or, as requested by the Agency and consistent with the terms of this Agreement, to Agency members, Southern California Public Power Authority ("SCPPA") or SCPPA members.
- 1.5 Request for Work to be Performed.** At such time that Agency determines to have Contractor perform Work under this Agreement, Agency shall issue a Purchase Order. The Purchase Order shall identify the specific Work to be performed ("Requested Work"), may include a not-to-exceed cap on monetary cap on Requested Work and all related expenditures authorized by that Purchase Order, and shall include a time by which the Requested Work shall be completed. Contractor shall have seven calendar days from the date of the Agency's issuance of the Purchase Order in which to respond in writing that Contractor chooses not to perform the Requested Work. If Contractor agrees to perform the Requested Work, begins to perform the Requested Work, or does not respond within the seven day period specified, then Contractor will have

agreed to perform the Requested Work on the terms set forth in the Purchase Order, this Agreement and its Exhibits.

Section 2. COMPENSATION. Agency hereby agrees to pay Contractor an amount **NOT TO EXCEED ONE MILLION FIVE HUNDRED THOUSAND** dollars (\$1,500,000.00) for the Work, which shall include all fees, costs, expenses and other reimbursables, as set forth in Contractor's fee schedule, attached hereto and incorporated herein as Exhibit B. This dollar amount is not a guarantee that Agency will pay that full amount to the Contractor, but is merely a limit of potential Agency expenditures under this Agreement.

2.1 Invoices. Contractor shall submit invoices, not more often than once a month during the term of this Agreement, based on the cost for services performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:

- The beginning and ending dates of the billing period;
- Work performed;
- The Purchase Order number authorizing the Requested Work;
- At Agency's option, for each work item in each task, a copy of the applicable time entries or time sheets shall be submitted showing the name of the person doing the work, the hours spent by each person, a brief description of the work, and each reimbursable expense, with supporting documentation, to Agency's reasonable satisfaction;
- At Agency's option, the total number of hours of work performed under the Agreement by Contractor and each employee, agent, and subcontractor of Contractor performing work hereunder.

Invoices shall be sent to:

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678
Attn: Accounts Payable
AcctsPayable@ncpa.com

2.2 Monthly Payment. Agency shall make monthly payments, based on invoices received, for Work satisfactorily performed, and for authorized reimbursable costs incurred. Agency shall have thirty (30) days from the receipt of an invoice that complies with all of the requirements above to pay Contractor.

2.3 Payment of Taxes. Contractor is solely responsible for the payment of all federal, state and local taxes, including employment taxes, incurred under this Agreement.

2.4 Authorization to Perform Work. The Contractor is not authorized to perform any Work or incur any costs whatsoever under the terms of this Agreement until receipt of a Purchase Order from the Contract Administrator.

- 2.5 Timing for Submittal of Final Invoice.** Contractor shall have ninety (90) days after completion of the Requested Work to submit its final invoice for the Requested Work. In the event Contractor fails to submit an invoice to Agency for any amounts due within the ninety (90) day period, Contractor is deemed to have waived its right to collect its final payment for the Requested Work from Agency.

Section 3. FACILITIES AND EQUIPMENT. Except as set forth herein, Contractor shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the Work.

Section 4. INSURANCE REQUIREMENTS. Before beginning any Work under this Agreement, Contractor, at its own cost and expense, shall procure the types and amounts of insurance listed below and shall maintain the types and amounts of insurance listed below for the period covered by this Agreement.

- 4.1 Workers' Compensation.** If Contractor employs any person, Contractor shall maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Contractor with limits of not less than one million dollars (\$1,000,000.00) per accident.

4.2 Commercial General and Automobile Liability Insurance.

4.2.1 Commercial General Insurance. Contractor shall maintain commercial general liability insurance for the term of this Agreement, including products liability, covering any loss or liability, including the cost of defense of any action, for bodily injury, death, personal injury and broad form property damage which may arise out of the operations of Contractor. The policy shall provide a minimum limit of \$1,000,000 per occurrence/\$2,000,000 aggregate. Commercial general coverage shall be at least as broad as ISO Commercial General Liability form CG 0001 (current edition) on "an occurrence" basis covering comprehensive General Liability, with a self-insured retention or deductible of no more than \$100,000. No endorsement shall be attached limiting the coverage.

4.2.2 Automobile Liability. Contractor shall maintain automobile liability insurance form CA 0001 (current edition) for the term of this Agreement covering any loss or liability, including the cost of defense of any action, arising from the operation, maintenance or use of any vehicle (symbol 1), whether or not owned by the Contractor, on or off Agency premises. The policy shall provide a minimum limit of \$1,000,000 per each accident, with a self-insured retention or deductible of no more than \$100,000. This insurance shall provide contractual liability covering all motor vehicles and mobile equipment to the extent coverage may be excluded from general liability insurance.

4.2.3 General Liability/Umbrella Insurance. The coverage amounts set forth above may be met by a combination of underlying and umbrella policies as long as in combination the limits equal or exceed those stated.

4.3 Professional Liability Insurance. Not Applicable.

4.4 Pollution Insurance. Not Applicable.

4.5 All Policies Requirements.

4.5.1 Verification of coverage. Prior to beginning any work under this Agreement, Contractor shall provide Agency with (1) a Certificate of Insurance that demonstrates compliance with all applicable insurance provisions contained herein and (2) policy endorsements to the policies referenced in Section 4.2 and in Section 4.4, if applicable, adding the Agency as an additional insured and declaring such insurance primary in regard to work performed pursuant to this Agreement.

4.5.2 Notice of Reduction in or Cancellation of Coverage. Contractor shall provide at least thirty (30) days prior written notice to Agency of any reduction in scope or amount, cancellation, or modification adverse to Agency of the policies referenced in Section 4.

4.5.3 Higher Limits. If Contractor maintains higher limits than the minimums specified herein, the Agency shall be entitled to coverage for the higher limits maintained by the Contractor.

4.5.4 Additional Certificates and Endorsements. If Contractor performs Work for Agency members, SCPPA and/or SCPPA members pursuant to this Agreement, Contractor shall provide the certificates of insurance and policy endorsements, as referenced in Section 4.5.1, naming the specific Agency member, SCPPA and/or SCPPA member for which the Work is to be performed.

4.5.5 Waiver of Subrogation. Contractor agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. In addition, the Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of Agency for all work performed by Contractor, its employees, agents and subcontractors.

4.6 Contractor's Obligation. Contractor shall be solely responsible for ensuring that all equipment, vehicles and other items utilized in the performance of Work are operated, provided or otherwise utilized in a manner that ensures they are and remain covered by the policies referenced in Section 4 during this Agreement. Contractor shall also ensure that all workers involved in the provision of Work are properly classified as employees, agents or independent contractors and are and remain covered by any and all workers' compensation insurance required by applicable law during this Agreement.

Section 5. INDEMNIFICATION AND CONTRACTOR'S RESPONSIBILITIES.

- 5.1 Effect of Insurance.** Agency's acceptance of insurance certificates and endorsements required under this Agreement does not relieve Contractor from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Agreement, Contractor acknowledges and agrees to the provisions of this section and that it is a material element of consideration.
- 5.2 Scope.** Contractor shall indemnify, defend with counsel reasonably acceptable to the Agency, and hold harmless the Agency, and its officials, commissioners, officers, employees, agents and volunteers from and against all losses, liabilities, claims, demands, suits, actions, damages, expenses, penalties, fines, costs (including without limitation costs and fees of litigation), judgments and causes of action of every nature arising out of or in connection with any acts or omissions by Contractor, its officers, officials, agents, and employees, except as caused by the sole or gross negligence of Agency. Notwithstanding, should this Agreement be construed as a construction agreement under Civil Code section 2783, then the exception referenced above shall also be for the active negligence of Agency.
- 5.3 Transfer of Title.** Not Applicable.

Section 6. STATUS OF CONTRACTOR.

- 6.1 Independent Contractor.** Contractor is an independent contractor and not an employee of Agency. Agency shall have the right to control Contractor only insofar as the results of Contractor's Work and assignment of personnel pursuant to Section 1; otherwise, Agency shall not have the right to control the means by which Contractor accomplishes Work rendered pursuant to this Agreement. Notwithstanding any other Agency, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Contractor and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by Agency, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of Agency and entitlement to any contribution to be paid by Agency for employer contributions and/or employee contributions for PERS benefits.

Contractor shall indemnify, defend, and hold harmless Agency for the payment of any employee and/or employer contributions for PERS benefits on behalf of Contractor or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of Agency. Contractor and Agency acknowledge and agree that compensation paid by Agency to Contractor under this Agreement is based upon Contractor's estimated costs of providing the Work, including salaries and benefits of employees, agents and subcontractors of Contractor.

Contractor shall indemnify, defend, and hold harmless Agency from any lawsuit, administrative action, or other claim for penalties, losses, costs, damages, expense and liability of every kind, nature and description that arise out of, pertain to, or relate to such claims, whether directly or indirectly, due to Contractor's failure to secure workers' compensation insurance for its employees, agents, or subcontractors.

Contractor agrees that it is responsible for the provision of group healthcare benefits to its fulltime employees under 26 U.S.C. § 4980H of the Affordable Care Act. To the extent permitted by law, Contractor shall indemnify, defend and hold harmless Agency from any penalty issued to Agency under the Affordable Care Act resulting from the performance of the Services by any employee, agent, or subcontractor of Contractor.

- 6.2 Contractor Not Agent.** Except as Agency may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of Agency in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, pursuant to this Agreement to bind Agency to any obligation whatsoever.
- 6.3 Assignment and Subcontracting.** This Agreement contemplates personal performance by Contractor and is based upon a determination of Contractor's unique professional competence, experience, and specialized professional knowledge. A substantial inducement to Agency for entering into this Agreement was and is the personal reputation and competence of Contractor. Contractor may not assign this Agreement or any interest therein without the prior written approval of the Agency. Contractor shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors identified in Exhibit A, without prior written approval of the Agency. Where written approval is granted by the Agency, Contractor shall supervise all work subcontracted by Contractor in performing the Work and shall be responsible for all work performed by a subcontractor as if Contractor itself had performed such work. The subcontracting of any work to subcontractors shall not relieve Contractor from any of its obligations under this Agreement with respect to the Work and Contractor is obligated to ensure that any and all subcontractors performing any Work shall be fully insured in all respects and to the same extent as set forth under Section 4, to Agency's satisfaction.
- 6.4 Certification as to California Energy Commission.** If requested by the Agency, Contractor shall, at the same time it executes this Agreement, execute Exhibit C.
- 6.5 Certification as to California Energy Commission Regarding Hazardous Materials Transport Vendors.** If requested by the Agency, Contractor shall, at the same time it executes this Agreement, execute Exhibit D.
- 6.6 Maintenance Labor Agreement.** If the Work is subject to the terms of one or more Maintenance Labor Agreements, which are applicable only to certain types

of construction, repair and/or maintenance projects, then Contractor shall execute Exhibit E and/or similar documentation as to compliance.

Section 7. LEGAL REQUIREMENTS.

- 7.1 Governing Law.** The laws of the State of California shall govern this Agreement.
- 7.2 Compliance with Applicable Laws.** Contractor and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 Licenses and Permits.** Contractor represents and warrants to Agency that Contractor and its employees, agents, and subcontractors (if any) have and will maintain at their sole expense during the term of this Agreement all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice their respective professions.
- 7.4 Monitoring by DIR.** The Work is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
- 7.5 Registration with DIR.** During the term of this Agreement, Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform Work consistent with Labor Code section 1725.5.
- 7.6 Prevailing Wage Rates.** In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work as provided in the California Labor Code must be paid to all workers engaged in performing the Work. In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for the locality in which the Work is to be performed; the Agency has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the Work is to be performed for each craft, classification or type of worker needed to perform the project; and copies of the prevailing rate of per diem wages are on file at the Agency and will be made available on request. Throughout the performance of the Work, Contractor must comply with all applicable laws and regulations that apply to wages earned in performance of the Work. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the Agency harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker or any other third party with regard thereto.

Additionally, in accordance with the California Administrative Code, Title 8, Group 3, Article 2, Section 16000, Publication of Prevailing Wage Rates by Awarding

Bodies, copies of the applicable determination of the Director can be found on the web at: <http://www.dir.ca.gov/DLSR/PWD/> and may be reviewed at any time.

Contractor shall be required to submit to the Agency during the contract period, copies of Public Works payroll reporting information per California Department of Industrial Relations, Form A- 1-131 (New 2-80) concerning work performed under this Agreement.

Contractor shall comply with applicable law, including Labor Code Sections 1774 and 1775. In accordance with Section 1775, Contractor shall forfeit as a penalty to Agency \$50.00 for each calendar day or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of Industrial Relations for such work or craft in which such worker is employed for any Work done under the Agreement by Contractor or by any subcontractor under Contractor in violation of the provisions of the Labor Code and in particular, Labor Code Sections 1770 *et seq.* In addition to the penalty and pursuant to Section 1775, the difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor.

Section 8. TERMINATION AND MODIFICATION.

- 8.1 Termination.** Agency may cancel this Agreement at any time and without cause upon ten (10) days prior written notice to Contractor.

In the event of termination, Contractor shall be entitled to compensation for Work satisfactorily completed as of the effective date of termination; Agency, however, may condition payment of such compensation upon Contractor delivering to Agency any or all records or documents (as referenced in Section 9.1 hereof).

- 8.2 Amendments.** The Parties may amend this Agreement only by a writing signed by both of the Parties.
- 8.3 Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between Agency and Contractor shall survive the termination of this Agreement.

- 8.4 Options upon Breach by Contractor.** If Contractor materially breaches any of the terms of this Agreement, including but not limited to those set forth in Section 4, Agency's remedies shall include, but not be limited to, the following:

- 8.4.1** Immediately terminate the Agreement;
- 8.4.2** Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Contractor pursuant to this Agreement;

8.4.3 Retain a different Contractor to complete the Work not finished by Contractor; and/or

8.4.4 Charge Contractor the difference between the costs to complete the Work that is unfinished at the time of breach and the amount that Agency would have paid Contractor pursuant hereto if Contractor had completed the Work.

Section 9. KEEPING AND STATUS OF RECORDS.

9.1 Records Created as Part of Contractor's Performance. All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Contractor prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of the Agency. Contractor hereby agrees to deliver those documents to the Agency upon termination of the Agreement. Agency and Contractor agree that, unless approved by Agency in writing, Contractor shall not release to any non-parties to this Agreement any data, plans, specifications, reports and other documents.

9.2 Contractor's Books and Records. Contractor shall maintain any and all records or other documents evidencing or relating to charges for Work or expenditures and disbursements charged to the Agency under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Contractor under this Agreement.

9.3 Inspection and Audit of Records. Any records or documents that this Agreement requires Contractor to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of the Agency. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars (\$10,000.00), the Agreement shall be subject to the examination and audit of the State Auditor, at the request of Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under this Agreement.

9.4 Confidential Information and Disclosure.

9.4.1 Confidential Information. The term "Confidential Information", as used herein, shall mean any and all confidential, proprietary, or trade secret information, whether written, recorded, electronic, oral or otherwise, where the Confidential Information is made available in a tangible medium of expression and marked in a prominent location as confidential, proprietary and/or trade secret information. Confidential Information shall not include information that: (a) was already known to the Receiving Party or is otherwise a matter of public knowledge, (b) was disclosed to Receiving Party by a third party without violating any confidentiality

agreement, (c) was independently developed by Receiving Party without reverse engineering, as evidenced by written records thereof, or (d) was not marked as Confidential Information in accordance with this section.

9.4.2 Non-Disclosure of Confidential Information. During the term of this Agreement, either party may disclose (the "Disclosing Party") Confidential Information to the other party (the "Receiving Party"). The Receiving Party: (a) shall hold the Disclosing Party's Confidential Information in confidence; and (b) shall take all reasonable steps to prevent any unauthorized possession, use, copying, transfer or disclosure of such Confidential Information.

9.4.3 Permitted Disclosure. Notwithstanding the foregoing, the following disclosures of Confidential Information are allowed. Receiving Party shall endeavor to provide prior written notice to Disclosing Party of any permitted disclosure made pursuant to Section 9.4.3.2 or 9.4.3.3. Disclosing Party may seek a protective order, including without limitation, a temporary restraining order to prevent or contest such permitted disclosure; provided, however, that Disclosing Party shall seek such remedies at its sole expense. Neither party shall have any liability for such permitted disclosures:

9.4.3.1 Disclosure to employees, agents, contractors, subcontractors or other representatives of Receiving Party that have a need to know in connection with this Agreement.

9.4.3.2 Disclosure in response to a valid order of a court, government or regulatory agency or as may otherwise be required by law; and

9.4.3.3 Disclosure by Agency in response to a request pursuant to the California Public Records Act.

9.4.4 Handling of Confidential Information. Upon conclusion or termination of the Agreement, Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof), if requested by Disclosing Party in writing. Notwithstanding the foregoing, the Receiving Party may retain copies of such Confidential Information, subject to the confidentiality provisions of this Agreement: (a) for archival purposes in its computer system; (b) in its legal department files; and (c) in files of Receiving Party's representatives where such copies are necessary to comply with applicable law. Party shall not disclose the Disclosing Party's Information to any person other than those of the Receiving Party's employees, agents, consultants, contractors and subcontractors who have a need to know in connection with this Agreement.

Section 10. PROJECT SITE.

- 10.1 Operations at the Project Site.** Each Project site may include the power plant areas, all buildings, offices, and other locations where Work is to be performed, including any access roads. Contractor shall perform the Work in such a manner as to cause a minimum of interference with the operations of the Agency; if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4; and other contractors at the Project site and to protect all persons and property thereon from damage or injury. Upon completion of the Work at a Project site, Contractor shall leave such Project site clean and free of all tools, equipment, waste materials and rubbish, stemming from or relating to Contractor's Work.
- 10.2 Contractor's Equipment, Tools, Supplies and Materials.** Contractor shall be solely responsible for the transportation, loading and unloading, and storage of any equipment, tools, supplies or materials required for performing the Work, whether owned, leased or rented. Neither Agency nor, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, will be responsible for any such equipment, supplies or materials which may be lost, stolen or damaged or for any additional rental charges for such. Equipment, tools, supplies and materials left or stored at a Project site, with or without permission, is at Contractor's sole risk. Anything left on the Project site an unreasonable length of time after the Work is completed shall be presumed to have been abandoned by the Contractor. Any transportation furnished by Agency or, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, shall be solely as an accommodation and neither Agency nor, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, shall have liability therefor. Contractor shall assume the risk and is solely responsible for its owned, non-owned and hired automobiles, trucks or other motorized vehicles as well as any equipment, tools, supplies, materials or other property which is utilized by Contractor on the Project site. All materials and supplies used by Contractor in the Work shall be new and in good condition.
- 10.3 Use of Agency Equipment.** Contractor shall assume the risk and is solely responsible for its use of any equipment owned and property provided by Agency and, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, for the performance of Work.

Section 11. WARRANTY.

- 11.1 Nature of Work.** In addition to any and all warranties provided or implied by law or public policy, Contractor warrants that all Work shall be free from defects in design and workmanship, and that Contractor shall perform all Work in accordance with applicable federal, state, and local laws, rules and regulations including engineering, construction and other codes and standards and prudent electrical utility standards, and in accordance with the terms of this Agreement.

- 11.2 Deficiencies in Work.** In addition to all other rights and remedies which Agency may have, Agency shall have the right to require, and Contractor shall be obligated at its own expense to perform, all further Work which may be required to correct any deficiencies which result from Contractor's failure to perform any Work in accordance with the standards required by this Agreement. If during the term of this Agreement or the one (1) year period following completion of the Work, any equipment, supplies or other materials or Work used or provided by Contractor under this Agreement fails due to defects in material and/or workmanship or other breach of this Agreement, Contractor shall, upon any reasonable written notice from Agency, replace or repair the same to Agency's satisfaction.
- 11.3 Assignment of Warranties.** Contractor hereby assigns to Agency all additional warranties, extended warranties, or benefits like warranties, such as insurance, provided by or reasonably obtainable from suppliers of equipment and material used in the Work.

Section 12. HEALTH AND SAFETY PROGRAMS. The Contractor shall establish, maintain, and enforce safe work practices, and implement an accident/incident prevention program intended to ensure safe and healthful operations under their direction. The program shall include all requisite components of such a program under Federal, State and local regulations and shall comply with all site programs established by Agency and, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4.

- 12.1** Contractor is responsible for acquiring job hazard assessments as necessary to safely perform the Work and provide a copy to Agency upon request.
- 12.2** Contractor is responsible for providing all employee health and safety training and personal protective equipment in accordance with potential hazards that may be encountered in performance of the Work and provide copies of the certified training records upon request by Agency. Contractor shall be responsible for proper maintenance and/or disposal of their personal protective equipment and material handling equipment.
- 12.3** Contractor is responsible for ensuring that its lower-tier subcontractors are aware of and will comply with the requirements set forth herein.
- 12.4** Agency, or its representatives, may periodically monitor the safety performance of the Contractor performing the Work. Contractors and its subcontractors shall be required to comply with the safety and health obligations as established in the Agreement. Non-compliance with safety, health, or fire requirements may result in cessation of work activities, until items in non-compliance are corrected. It is also expressly acknowledged, understood and agreed that no payment shall be due from Agency to Contractor under this Agreement at any time when, or for any Work performed when, Contractor is not in full compliance with this Section 12.

- 12.5** Contractor shall immediately report any injuries to the Agency site safety representative. Additionally, the Contractor shall investigate and submit to the Agency site safety representative copies of all written accident reports, and coordinate with Agency if further investigation is requested.
- 12.6** Contractor shall take all reasonable steps and precautions to protect the health of its employees and other site personnel with regard to the Work. Contractor shall conduct occupational health monitoring and/or sampling to determine levels of exposure of its employees to hazardous or toxic substances or environmental conditions. Copies of any sampling results will be forwarded to the Agency site safety representative upon request.
- 12.7** Contractor shall develop a plan to properly handle and dispose of any hazardous wastes, if any, Contractor generates in performing the Work.
- 12.8** Contractor shall advise its employees and subcontractors that any employee who jeopardizes his/her safety and health, or the safety and health of others, may be subject to actions including removal from Work.
- 12.9** Contractor shall, at the sole option of the Agency, develop and provide to the Agency a Hazardous Material Spill Response Plan that includes provisions for spill containment and clean-up, emergency contact information including regulatory agencies and spill sampling and analysis procedures. Hazardous Materials shall include diesel fuel used for trucks owned or leased by the Contractor.
- 12.10** If Contractor is providing Work to an Agency Member, SCPPA or SCPPA member (collectively "Member" solely for the purpose of this section) pursuant to Section 1.4 hereof, then that Member shall have the same rights as the Agency under Sections 12.1, 12.2, 12.4, 12.5, and 12.6 hereof.

Section 13. MISCELLANEOUS PROVISIONS.

- 13.1** **Attorneys' Fees.** If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.
- 13.2** **Venue.** In the event that either party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Placer or in the United States District Court for the Eastern District of California.
- 13.3** **Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in

whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

- 13.4 No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.
- 13.5 Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the Parties.
- 13.6 Conflict of Interest.** Contractor may serve other clients, but none whose activities within the corporate limits of Agency or whose business, regardless of location, would place Contractor in a "conflict of interest," as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Contractor shall not employ any Agency official in the work performed pursuant to this Agreement. No officer or employee of Agency shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.*

- 13.7 Contract Administrator.** This Agreement shall be administered by Ken Speer, Assistant General Manager, or his/her designee, who shall act as the Agency's representative. All correspondence shall be directed to or through the representative.
- 13.8 Notices.** Any written notice to Contractor shall be sent to:

Martech
Attention: Rick Leddy
142 N. Cluff Avenue
Lodi, CA 95240

Any written notice to Agency shall be sent to:

Randy S. Howard
General Manager
Northern California Power Agency
651 Commerce Drive
Roseville, CA 95678

With a copy to:

Jane E. Luckhardt
General Counsel
Northern California Power Agency
651 Commerce Drive
Roseville, CA 95678

- 13.9 Professional Seal.** Where applicable in the determination of the Agency, the first page of a technical report, first page of design specifications, and each page of construction drawings shall be stamped/sealed and signed by the licensed professional responsible for the report/design preparation.
- 13.10 Integration; Incorporation.** This Agreement, including all the exhibits attached hereto, represents the entire and integrated agreement between Agency and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral. All exhibits attached hereto are incorporated by reference herein.
- 13.11 Alternative Dispute Resolution.** If any dispute arises between the Parties that cannot be settled after engaging in good faith negotiations, Agency and Contractor agree to resolve the dispute in accordance with the following:
- 13.11.1** Each party shall designate a senior management or executive level representative to negotiate any dispute;
 - 13.11.2** The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.
 - 13.11.3** If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiation between legal counsel. If the above process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.
 - 13.11.4** The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.
 - 13.11.5** The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.
 - 13.11.6** The alternative dispute resolution process is a material condition to this Agreement and must be exhausted as an administrative remedy prior to either Party initiating legal action. This alternative dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 *et seq.*
- 13.12 Controlling Provisions.** In the case of any conflict between the terms of this Agreement and the Exhibits hereto, a Purchase Order, or Contractor's Proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and a Purchase Order or the Contractor's Proposal, the Exhibits shall control. In the case of any conflict between the terms of a Purchase Order and the Contractor's Proposal, the Purchase Order shall control.

13.13 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.

13.14 Construction of Agreement. Each party hereto has had an equivalent opportunity to participate in the drafting of the Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting party shall not apply hereto.

13.15 No Third Party Beneficiaries. This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties. However, should Contractor provide Work to an Agency member, SCPPA or SCPPA member (collectively for the purpose of this section only "Member") pursuant to Section 1.4, the parties recognize that such Member may be a third party beneficiary solely as to the Purchase Order and Requested Work relating to such Member.

The Parties have executed this Agreement as of the date signed by the Agency.

NORTHERN CALIFORNIA POWER AGENCY

MECHANICAL ANALYSIS REPAIR, INC.
dba MARTECH

Date _____

Date _____

RANDY S. HOWARD,
General Manager

RICHARD LEDDY,
President

Attest:

Assistant Secretary of the Commission

Approved as to Form:

Jane E. Luckhardt, General Counsel

EXHIBIT A

SCOPE OF WORK

Mechanical Analysis/Repair, Inc. dba Martech ("Contractor") shall provide machining services as requested by the Northern California Power Agency ("Agency") at any facilities owned or operated by Agency, its Members, Southern California Public Power Authority (SCPPA) or SCPPA members.

Services to include, but not be limited to the following:

- Machining
- Balancing
- Hydroelectric Services
- AC/DC Motor Rewind and Rebuild
- Rebuild or Re-Manufacturing of Equipment
- Maintenance

EXHIBIT B

COMPENSATION SCHEDULE AND HOURLY FEES

Compensation for all work, including hourly fees and expenses, shall not exceed the amount set forth in Section 2 hereof. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

* Shop & Non-Prevailing Wage (PW) Rate Sheet, All PW work needs to be quoted

General Rate Sheet 2019

General Shop Labor

- Straight Time \$ 80.00
- Overtime \$120.00

Shop Services Machining and Balancing

- Straight Time \$ 85.00
- Overtime \$127.50

Field Superintendent/Foreman

- Straight Time \$ 85.00
- Overtime \$127.50

Field Balancing and Laser Alignment

- Straight Time \$100.00
- Overtime \$150.00
- Minimum of 4 hours will be billed

Crane plus Operator

- Straight Time \$185.00
- Overtime \$227.50
- Minimum of 4 hours will be billed

Health & Safety Coordinator

- Straight Time \$ 80.00
- Overtime \$120.00

Confined Space Team Member

- Straight Time \$ 80.00
- Overtime \$120.00

Rescue Team Member

- Straight Time \$105.00
- Overtime \$157.50

Millwright

- Straight Time \$ 75.00
- Overtime \$112.50
- Minimum of 4 hours will be billed

Field Engineering Services, Analytical Services

- **Straight Time** **\$105.00**
- **Overtime** **\$157.50**

Administrative Support

- **Straight Time** **\$ 45.00**
- **Overtime** **\$ 67.50**

Field Service Vehicle

- **Daily Charge** **\$ 75.00**

Notes:

- **Rates are "Fully Loaded" –Mechanic's/Millwrights arrive at jobsite fully equipped**
- **Prevailing Wage rates are as per county**
- **All field service billed at half and full day rates only**
- **Double time rates apply 12 hours, On all call out after hours, Saturdays after 8hrs, all Sundays and Holidays**
- **Mileage and fuel surcharges apply and are site/location specific**
- **Environmental and Hazardous Waste disposal charges apply**
- **Subsistence and lodging charges apply for all overnight stays**

Pricing for services to be performed at NCPA Member or SCPA locations will be quoted at the time services are requested.

NOTE: As a public agency, NCPA shall not reimburse Contractor for travel, food and related costs in excess of those permitted by the Internal Revenue Service.

EXHIBIT C

CERTIFICATION

Affidavit of Compliance for Contractors

I,

(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

(Company name)

for contract work at:

LODI ENERGY CENTER, 12745 N. THORNTON ROAD, LODI, CA 95242

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 _____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

NOT APPLICABLE

EXHIBIT D

CERTIFICATION

Affidavit of Compliance for Hazardous Materials Transport Vendors

I, _____,

(Name of person signing affidavit)(Title)

do hereby certify that the below-named company has prepared and implemented security plans in conformity with 49 CFR 172, subpart I and has conducted employee background investigations in conformity with 49 CFR 172.802(a), as the same may be amended from time to time,

(Company name)

for hazardous materials delivery to:

LODI ENERGY CENTER, 12745 N. THORNTON ROAD, LODI, CA 95242

(Project name and location)

as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 ____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

EXHIBIT E

**ATTACHMENT A [from MLA]
AGREEMENT TO BE BOUND**

**MAINTENANCE LABOR AGREEMENT ATTACHMENT
LODI ENERGY CENTER PROJECT**

The undersigned hereby certifies and agrees that:

- 1) It is an Employer as that term is defined in Section 1.4 of the Lodi Energy Center Project Maintenance Labor Agreement (“Agreement” solely for the purposes of this Exhibit E) because it has been, or will be, awarded a contract or subcontract to assign, award or subcontract Covered Work on the Project (as defined in Section 1.2 and 2.1 of the Agreement), or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.
- 2) In consideration of the award of such contract or subcontract, and in further consideration of the promises made in the Agreement and all attachments thereto (a copy of which was received and is hereby acknowledged), it accepts and agrees to be bound by the terms and condition of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.
- 3) If it performs Covered Work, it will be bound by the legally established trust agreements designated in local master collective bargaining agreements, and hereby authorizes the parties to such local trust agreements to appoint trustees and successor trustee to administer the trust funds, and hereby ratifies and accepts the trustees so appointed as if made by the undersigned.
- 4) It has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of the Agreement.
- 5) It will secure a duly executed Agreement to be Bound, in form identical to this documents, from any Employer(s) at any tier or tiers with which it contracts to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.

DATED: _____ Name of Employer _____

(Authorized Officer & Title)

(Address)



Commission Staff Report

Date: May 14, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: 2019 Steam Field Operations and Generation Forecast Report

AGENDA CATEGORY: Consent

FROM:	Ken Speer <i>KDS</i>	METHOD OF SELECTION:
	Assistant General Manager	N/A
Division:	Generation Services	<i>If other, please describe:</i>
Department:	Geothermal	

IMPACTED MEMBERS:		
All Members	<input type="checkbox"/>	City of Lodi <input checked="" type="checkbox"/>
Alameda Municipal Power	<input checked="" type="checkbox"/>	City of Shasta Lake <input type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Ukiah <input checked="" type="checkbox"/>
City of Biggs	<input checked="" type="checkbox"/>	City of Lompoc <input checked="" type="checkbox"/>
City of Gridley	<input checked="" type="checkbox"/>	City of Palo Alto <input type="checkbox"/>
City of Healdsburg	<input checked="" type="checkbox"/>	City of Redding <input type="checkbox"/>
		City of Roseville <input checked="" type="checkbox"/>
		City of Santa Clara <input checked="" type="checkbox"/>
		Plumas-Sierra REC <input checked="" type="checkbox"/>
		Port of Oakland <input type="checkbox"/>
		Truckee Donner PUD <input type="checkbox"/>
		Other <input type="checkbox"/>
<i>If other, please specify</i>		

RECOMMENDATION:

Adopt Resolution 19-41 approving the 2019 Steam Field Operations and Generation Forecast Report dated April 2019 as the Geothermal Operating Protocol effective July 1, 2019. This Operating Protocol is to remain in effect until replaced by the Commission.

BACKGROUND:

The Steam Field Operations and Generation Forecast Report is an in depth study of The Geysers reservoir relative to the operation of NCPA's Geothermal facility and provides a generation forecast of the facility. This report will act as the Operating Protocol with the goal of maximizing the generation output.

The Operating Protocol currently uses a two-zone strategy with wells on the west side of the NCPA lease producing to both Plant #1, Units #1 and #2. Wells on the east side of the NCPA lease produce to Plant #2, Unit #4. This Protocol will maximize generation while allowing for scheduling flexibility and reduction of load under the proper economic conditions. For 2019, these conditions are:

- Day Ahead Market Prices are a minimum of negative \$25 per MWhr.
- The level of curtailment will be limited to 45 MW with discretion to adjust this level based on the steam field response.
- Duration of the curtailment is to be a minimum of 4 hours.
- Curtailments are limited to once per calendar day.

The Protocol establishes a 2019 annual generation target of 92.4 gross MW.

FISCAL IMPACT:

The 2019-20 approved Geothermal budget covers the proposed action.

SELECTION PROCESS:

Not applicable.

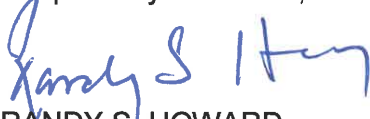
ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

The recommendation above was reviewed by the Facilities Committee on May 1, 2019 and was recommended for Commission approval on Consent Calendar.

Respectfully submitted,

A handwritten signature in blue ink that reads "Randy S. Howard". The signature is written in a cursive style with a large initial "R".

RANDY S. HOWARD
General Manager

Attachments:

- Resolution
- 2019 Steam Field Operations and Generation Forecast Report

RESOLUTION 19-41

RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY APPROVING THE 2019 STEAM FIELD OPERATION AND GENERATION FORECAST REPORT AS THE 2019 GEOTHERMAL OPERATING PROTOCOL

(reference Staff Report #155:19)

WHEREAS, the Northern California Power Agency (NCPA) operates and maintains on behalf of the project owners a Geothermal Facility near Middletown, CA, consisting of two power plants with containment areas, and 80 steam production and injection wells connected by roads; and

WHEREAS, the 2019 Steam Field Operations and Generation Forecast Report is an in depth study of The Geysers reservoir relative to the operation of NCPA's GEO facility and provides a generation forecast of the facility. This report will act as the Operating Protocol with the goal of maximizing the generation output. The Operating Protocol currently uses a two-zone strategy with wells on the west side of the NCPA lease producing to Plant 1, Units #1 and #2. Wells on the east side of the NCPA lease produce to Plant #2, Unit #4. This Protocol will maximize generation while allowing for scheduling flexibility and reduction of load under the proper economic conditions. For 2019, these conditions are:

- Day Ahead Market Prices are a minimum of negative \$25 per MWhr.
- The level of curtailment will be limited to 45 MW with discretion to adjust this level based on the steam field response.
- Duration of the curtailment is to be a minimum of 4 hours.
- Curtailments are limited to once per calendar day.

The Protocol establishes a 2019 annual generation target of 92.4 gross MW; and

WHEREAS, 2019-20 approved budget covers the proposed action; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency adopts the Steam Field Operations and Generation Forecast Report dated April 2019 as the Geothermal Operating Protocol effective July 1, 2019, to remain in effect until replaced by the Commission.

PASSED, ADOPTED and APPROVED this _____ day of _____, 2019 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

ROGER FRITH
CHAIR

ATTEST: CARY A. PADGETT
ASSISTANT SECRETARY



Steam Field Operations

Forecast Report – April 2019



NCPA
Generation Services – Geothermal Facilities
Steam Field Operations and Forecast Report

April 2019

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NCPA
Generation Services Business Unit
Steam Field Operations and Forecast Report

April 2019

Introduction

This report provides an update on the status of the NCPA Geothermal Project. There are two main sections:

- I. A review of steam field operations including annual production and injection volumes, the Geothermal Operating Plan, water injection program, and projects.
- II. A review of 2018 reservoir performance with a generation forecast for 2019.

Analysis of geothermal reservoir during 2018 indicates a continued 1.9% harmonic decline consistent with prior projections. The average generating capacity for 2018 was 99.8 MW gross or 91.8 MW net. Net generation for the year was 804.4 GWhrs.

Water injection continues to be essential in maintaining reservoir pressure and mitigating steam production decline rates. The Southeast Geysers Effluent Pipeline project brings an average of 5,600 gpm of wastewater to The Geysers. NCPA and a nearby power producer share the water. In 2018, NCPA received 41.2% of the wastewater delivered to the Geysers. Combined with steam condensate, 2018 water injection rates averaged 3,016 gpm and was a reduction from the previous year's rate of 3,608 gpm. The drop in injection rate was due to NCPA testing of the reservoir response to reduced injection for approximately three months.

The 2019 generation forecast projects the average generating capacity to be 92.4 MW gross or 82.4 MW net for the year. NCPA geothermal facilities are forecast to generate 716.9 GWhrs net in 2019. Generation levels in 2019 will be reduced due to extended overhauls of Units #1 and #2 of Plant #1 and also a reduction in steam production to Plant #2 due to well workovers on P-Site. The estimated 25 year projected net reserves are 15,311 GWhrs.

In terms of the fiscal year, the FY 2019 net generation is estimated to be 760.3 GWhrs. The net generation projected for FY 2020 is 731.9 GWhrs.

I. STEAM FIELD OPERATIONS

In This Section

- ▶ Overview of Annual Production and Injection
- ▶ Geothermal Operating Plan
- ▶ Water Injection Program
- ▶ Plant and Steam Field Projects

A. Overview of 2018 Production and Injection

NCPA continued to operate the Geothermal Project as a base load facility in 2018. Steam production for the year was 14.65 Glbs with water injection of 13.19 Glbs for an annual mass replacement ratio of 90%. Water injection on the NCPA lease is a combination of steam condensate recovered from the cooling towers and wastewater from the Southeast Geysers Effluent Pipeline (SEGEP). The water from the SEGEP pipeline is shared between NCPA and a nearby power producer. NCPA received 41.2% of the wastewater in 2018. The average total injection rate for NCPA decreased from 3,608 gpm in 2017 to 3,016 gpm in 2018.

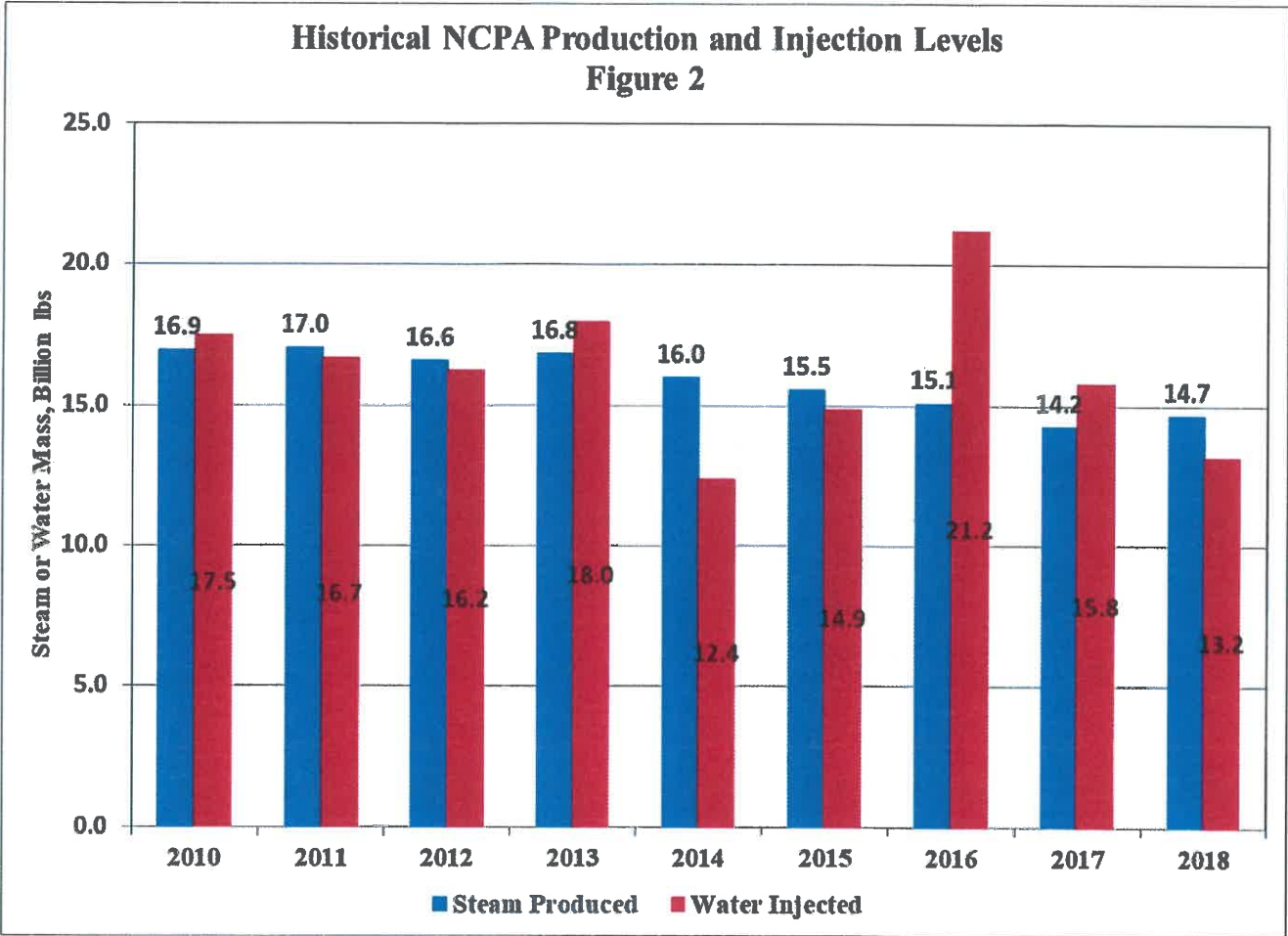
The main reason for the reduction was NCPA curtailed wastewater injection for approximately three months to determine if the reservoir was being harmed by too much injection and see if generation would improve by drying out the reservoir. During this period water injection was reduced from approximately 2,100 gpm to 919 gpm. The test showed that the reservoir was not being harmed by too much water injection and generation levels remained steady.

The cumulative mass replacement ratio from plant startup in 1983 through 2018 was 66.7% (*Figure 1*). The net mass withdrawal of steam from the reservoir (Mass Produced less Mass Injected) through 2018 is 223.2 billion lbs.

The average generation level for 2018 was 99.1 MW gross or 91.8 MW net. Generation was slightly lower than forecast due to several transmission line outages mandated by Pacific Gas & Electric in 2018. In 2019, generation capacity is forecast to be 92.4 MW gross or 82.4 MW net. The significant drop in average generation level is due to Units #1 and #2 of Plant #1 being down for overhaul in 2019.

Production Highlights during 2018 include:

- ▶ Annual gross generation level in 2018 was 99.8 MW or 91.8 MW net.
- ▶ Average annual mass replacement (i.e., the percentage of steam production replaced by water injection) was 90% in 2018. The 2018 average injection rate was 3,016 gpm and was a 16% decrease over the previous year. The decrease was due to NCPA testing the reservoir response to reduced injection.
- ▶ In 2019, the generation capacity is forecast to be 92.4 MW or 82.4 MW net.



B. Geothermal Operating Plan

The Geothermal Project Operating Agreement requires the NCPA Commission to establish an Operating Plan and an annual operating level for the Geothermal Units. The purpose of the plan is to maximize the efficient use of the geothermal resource, protect the power plants and equipment, and meet all regulatory and permitting requirements.

A Geothermal Operating Plan, effective July 1, 2018, was approved and recommended by the Coordinated Operating Group (COG), the Generation Services Business Unit, and the NCPA Commission during the May 24, 2018 meeting. The Plan establishes an Operating Protocol that maintains a Two Zone operation within the NCPA lease. The Two Zone Operation was implemented to improve operational response time during a unit trip at Plant #1 and maximize generation on the NCPA lease while minimizing reservoir communication with nearby competitor operations.

Under this Protocol, the Geothermal Units have normally operated in a baseload condition. Steam production from the west side of the lease, Zone 1, is directed to Units #1 and #2 at Plant #1. Steam production from the east side of the lease, Zone 2, is directed to Plant #2, Unit #4 (Figure 5).

While the Protocol maximizes generation, it does allow for scheduling flexibility and reduction of load under the proper economic conditions. The increase in renewable energy in the electrical market has resulted in economic incentives where daily curtailment of the Geothermal Units is being considered. It is recommended that the Operating Protocol allow curtailments to occur under the following conditions.

- Day Ahead Market Prices are a minimum of negative \$25 per MWhr.
- The level of curtailment will be limited to 45 MW with discretion to adjust this level based on the steam field response.
- Duration of the curtailment is to be a minimum of 4 hours.
- Curtailments are limited to once per calendar day.

The flexibility to adjust generating loads under these conditions will allow NCPA to take advantage of economic incentives while protecting the power plant equipment, steam field infrastructure and reservoir.

C. Water Injection Program

NCPA continues to operate the steam field in the manner intended to maximize the recovery of injected water. In order to maximize recovery, it is important to have sufficient water and distribute it over the widest possible area of the field. It is also necessary to inject water at the lowest possible rate to maximize the heat transfer between the reservoir rock and water. Other factors that weigh into water injection strategy are targeting hotter zones of the field and higher gas concentrations within the reservoir. The water injection program discusses NCPA's supplemental water source, the Southeast Geysers Effluent Pipeline (SEGEP), current injection operations, micro-earthquake activity and non-condensable gas trends.

1. Southeast Geysers Effluent Pipeline (SEGEP)

The Southeast Geysers Effluent Pipeline (SEGEP) project is a pipeline bringing water to The Geysers for the purpose of supplementing water injection in the field. During normal years, NCPA receives an average 2,700 gpm out of 5,600 gpm water that is delivered. Injection of this water into The Geysers reservoir helps mitigate reservoir pressure declines and increases steam reserves. *Figure 6* shows the historical SEGEP deliveries for NCPA and the total for the project.

SEGEP deliveries were reduced for approximately three months in 2018 to determine if the reservoir was being harmed by too much water injection and see if generation levels would increase by allowing the reservoir to dry out. Wastewater injection was reduced from approximately 2,100 gpm to 919 gpm during this period. No change in steam production was observed, so water injection was returned to normal levels.

2. Injection Operations

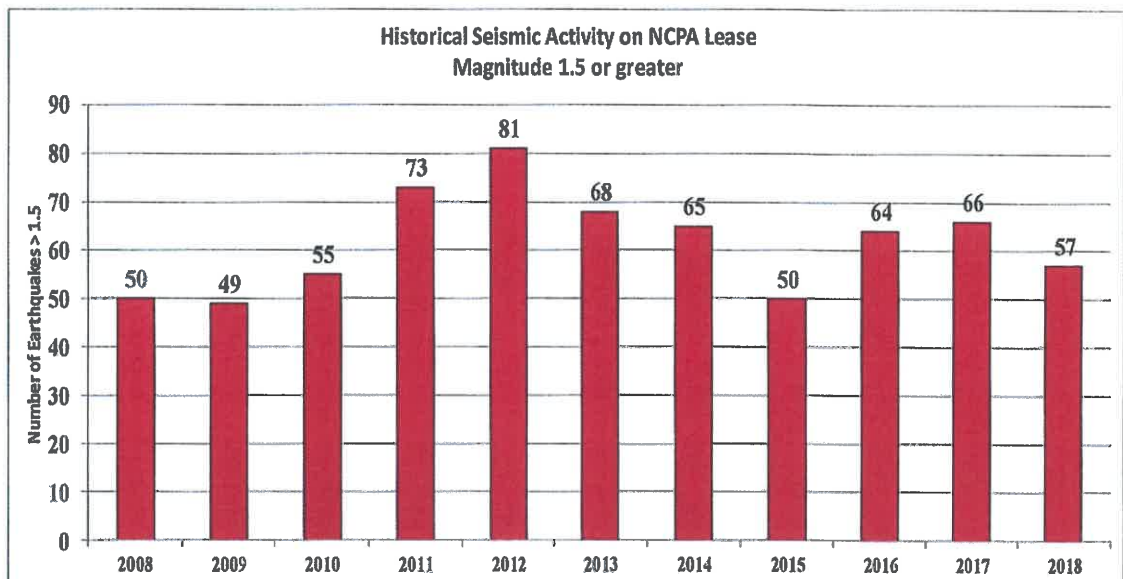
There were 10 different wells used for injection in 2018. The injection strategy continues to be an effort to spread water over large geographic area and limit injection rates down individual wells as much as possible. The 2018 overall injection rate of combined steam condensate and wastewater was 3,017 gpm. This is a reduction from 2017 when the overall injection rate was 3,608 gpm.

Figure 7 shows the relative location of the 10 injection wells on the NCPA lease. Five of these wells, E-8, H-4, Q-1, Q-4, and Q-10 were only connected to the SEGEP pipeline and therefore received only effluent or wastewater. One well, J-6, is a dedicated condensate injection well receiving water from Plant #2. The remaining four wells received a combination of condensate and wastewater. Figure 8 and Table 1 show the relative amounts and type of water each well received in 2018.

3. Micro-earthquake Activity

Studies by the United States Geological Survey (USGS) and others have demonstrated that the steam production and water injection at The Geysers can cause frequent micro seismic events to occur. As a result, NCPA and the other operators are required to continuously monitor and report on the earthquakes that occur within The Geysers geothermal field. Figure 9 is a map showing the locations of the 771 seismic events of magnitude 1.5 and larger that occurred within The Geysers field during 2018. Eleven of these events had an earthquake magnitude of 3.0 or greater. The largest seismic event was a magnitude 4.28 on a competitor lease.

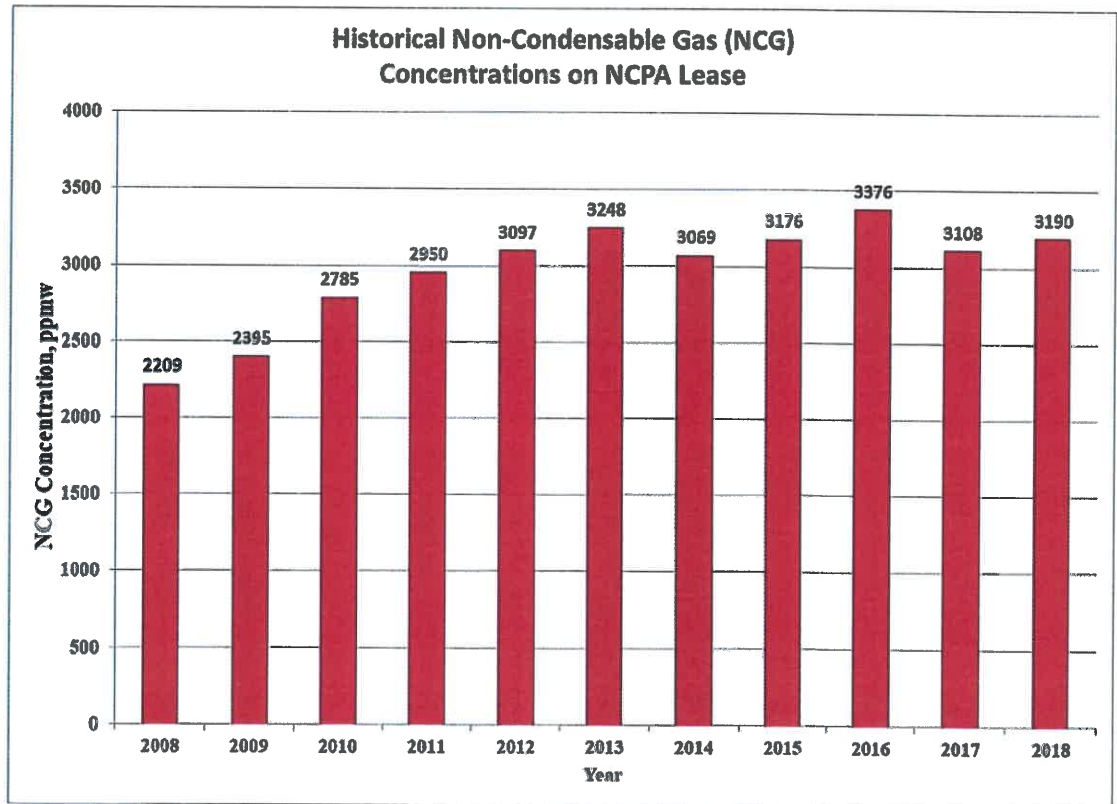
On the NCPA lease, there were 57 events of M=1.5 or greater. The largest event was a magnitude of 3.09. The figure below shows the historical seismic activity for the NCPA lease from 2008 through 2018. The seismic activity for 2018 was lower than the activity in 2017.



4. Non-condensable Gas (NCG) Trends

Non-Condensable Gas (NCG) is a natural product of the reservoir and may be present in varying concentrations within the steam that is produced at The Geysers. NCG production reduces plant efficiency and increases chemical treatment costs. The values vary significantly based on operating guidelines for the field, plant outages, or injection strategy. Water injection in areas of high gas concentration generally reduces NCG production and improves plant efficiency.

Table 4 shows an annual sampling of all the producing wells in the field and the analysis for NCG's. These values can vary somewhat based on daily operational changes and the adjustment of injection strategies within the field, but are considered to be typical concentrations of NCG's for these wells. NCG concentrations were up slightly from the 2017, but have been relatively stable over the last five years. Figure 10 shows a comparison of the relative changes throughout the field.



D. Geothermal Facility Projects

Major projects completed in 2018 were:

- NCPA Main Road Repair – The main road to NCPA’s geothermal facility is on private property and NCPA shares the maintenance cost with the nearby lessee Calpine. Approximately two miles of road was asphalt repaired, chip sealed, and striped in preparation for the winter months. The total cost of the project was \$301,327 with NCPA’s share of the cost \$202,000.
- Plant #2 Fire Line Replacement – The Plant #2 Fire Line Replacement was completed in 2018 and approved for service by the California Energy Commission. The fire line had previously developed leaks and in continual need of repair. A functioning fire line was required for the Permit to Operate and insurance reasons.

In 2019, the planned major projects are:

- Plant #1 Overhaul – Plant #1, Unit #2 is currently going through overhaul which started on April 1 and scheduled to run through May 10, 2019. Unit #1 will be coming out for overhaul on April 22 and return to service on May 26, 2019. The scope of work is to pull and inspect the both turbines, the Unit #2 generator, clean the condensers and Stretford gas processing equipment, and repair the balance of plant equipment. The total budgeted cost for the Plant #1 overhaul \$4.8 million which includes the following projects.
 - Plant #1 Ejector Upgrade – Steam ejectors at both Plants #1 and #2 are used to remove non-condensable gases from the steam condensers. The steam ejectors at Plant #1 are to be upgraded to operate at a lower pressure and use less steam.
 - Ball Cleaning System Upgrade – Ball cleaning systems are used to keep scale and debris from building up in the tubes of the steam condenser. Both ball cleaning systems at Plant #1 and #2 are over thirty years old and do not operate efficiently. They will be gradually replaced with systems that are more efficient.
- P-Site Well Workovers – A drilling program to workover wells P-4, P5, P-7, and abandon well P-9 is planned to start in June 2019. The wells have partially collapsed casing that is inhibiting flow from these wells. The workovers will remove the restriction and restore full flow from the wells. The P-Site workovers will cost an estimated \$9 million.

II. 2018 RESERVOIR PERFORMANCE REVIEW

In This Section

- ▶ Reservoir Pressure Distribution
- ▶ Reservoir Pressure and Flowrate Decline
- ▶ 2018 Generation Review
- ▶ 2019 Generation Forecast

Reservoir performance can be affected by a number of factors such as changes in the location or amount of water injected, the operating pressure of the field, gain or loss of production wells, or changes in the operation of nearby competitor leases. The effects of these changes on the reservoir are normally monitored by conducting pressure build-up tests on production wells, tracer tests on injection wells, and a continuous review of pressure, temperature, and flowrate data from the field. This section will discuss recent changes in reservoir pressure distribution, reservoir pressure decline, and steam field flowrate decline.

A. Reservoir Pressure Distribution

One of the most important parameters in predicting and explaining reservoir performance is static reservoir pressure. *Figure 11* shows areal pressure distributions of static reservoir pressures for January 2017 and April 2018. In general, wells on the west side of the field have the lowest reservoir pressures (< 80 psig) and the east side of the field continues to be the higher pressure area.

B. Reservoir Pressure and Flowrate Decline

Changes in reservoir pressure over time are a function of the mass-replacement ratio. By injecting steam condensate and supplementing it with run-off fresh water and secondary treated wastewater from the Southeast Geysers Project, the decline in reservoir pressures has moderated or slowed with time.

In 2019, pressure build-up tests were only done on 33 wells due to overhaul work at Plant #1. Shut-in pressures for another 31 wells were estimated based on past data. The estimated average wellhead shut-in pressure is 75.6 psig. The average well on the NCPA lease flows 24,300 lb/hr at 40.8 psig.

The projected flowrate decline is shown in *Figure 13*. In 2018, the overall steam field flow rate averaged 1,761 klbs/hr. This flow rate is projected to be 1,682 klbs/hr in 2019. The overall steam field decline is a harmonic 1.9%. Continued and strategic injection of water over a wide area of the reservoir is expected to enhance recovery and provide better reservoir pressure support in future years.

C. 2018 Generation Review

Net generation for the NCPA Geo Facilities in 2018 was 804.4 GWhr. For FY 2019, net generation is estimated to be 760.3 GWhrs. The 2018 gross generation level was an average of 99.8 MW while net generation level averaged 91.8 MW.

D. 2019 Generation Forecast

The updated forecast of future reservoir performance, and the resulting energy generation forecast for the NCPA geothermal plants, was developed using decline curve analysis. Included in the forecast are:

1. Operation of the steam field in a two-zone operation.
2. The continued benefits being derived from the Southeast Geysers Effluent Pipeline Project.

The most recently developed forecast of steam field operations is illustrated in *Figure 12*. This graph shows NCPA's 35 year historical data for both steam production and water injection, and forecasts of production and injection out to year 2043. With the startup of the Effluent Pipeline in September 1997, and with its continuous operation projected thereafter, the average annual mass replacement is approximately 100%. Water injection should continually exceed production in the future and a gradual decline in the level of steam production will approach a near-sustainable level of 80% of the mass of water injected.

The total amount of steam capable of being produced by NCPA through year 2043 is currently estimated at 297.2 billion pounds. Remaining net generation reserves are estimated to be 15,311 GWhr. *Figures 14* and *15* respectively show the projected net generation capacity and total net generation amount for 2019 through 2043. *Table 4* details the annual gross and net generation. A more detailed monthly five year forecast can be found in *Table 5*.

In 2019, it is estimated that the Geo Facilities will generate 716.9 GWhrs net. Respective gross and net generation capacity for the year are projected to be 92.4 MW gross and 82.4 MW net. Average generation levels will be reduced for two reasons. Units #1 and #2 of Plant #1 will be shut down for overhaul during the months of April and May 2019. Further, steam production to Plant #2 will be reduced approximately 195 kph for three months for well workovers on P-Site. For FY 2020, the net generation amount is projected to be 731.9 GWhrs.

SUMMARY

Steam Field Operations

- The NCPA lease produced 14.7 Glbs steam while injecting 13.2 Glbs of water resulting in an average mass replacement of 90% for the year.
- The average gross generation level for 2018 was 99.8 MW gross while the net generation level was 91.8 MW net.
- The average water injection decreased from 3,608 in 2017 to 3,016 gpm in 2018. The drop in injection rate was mainly due to a three month testing of the reservoir response to reduced injection levels and whether generation levels would increase as a result of increased temperatures in the reservoir. No increase in generation was observed due to the reduced injection and rates were later returned to normal.

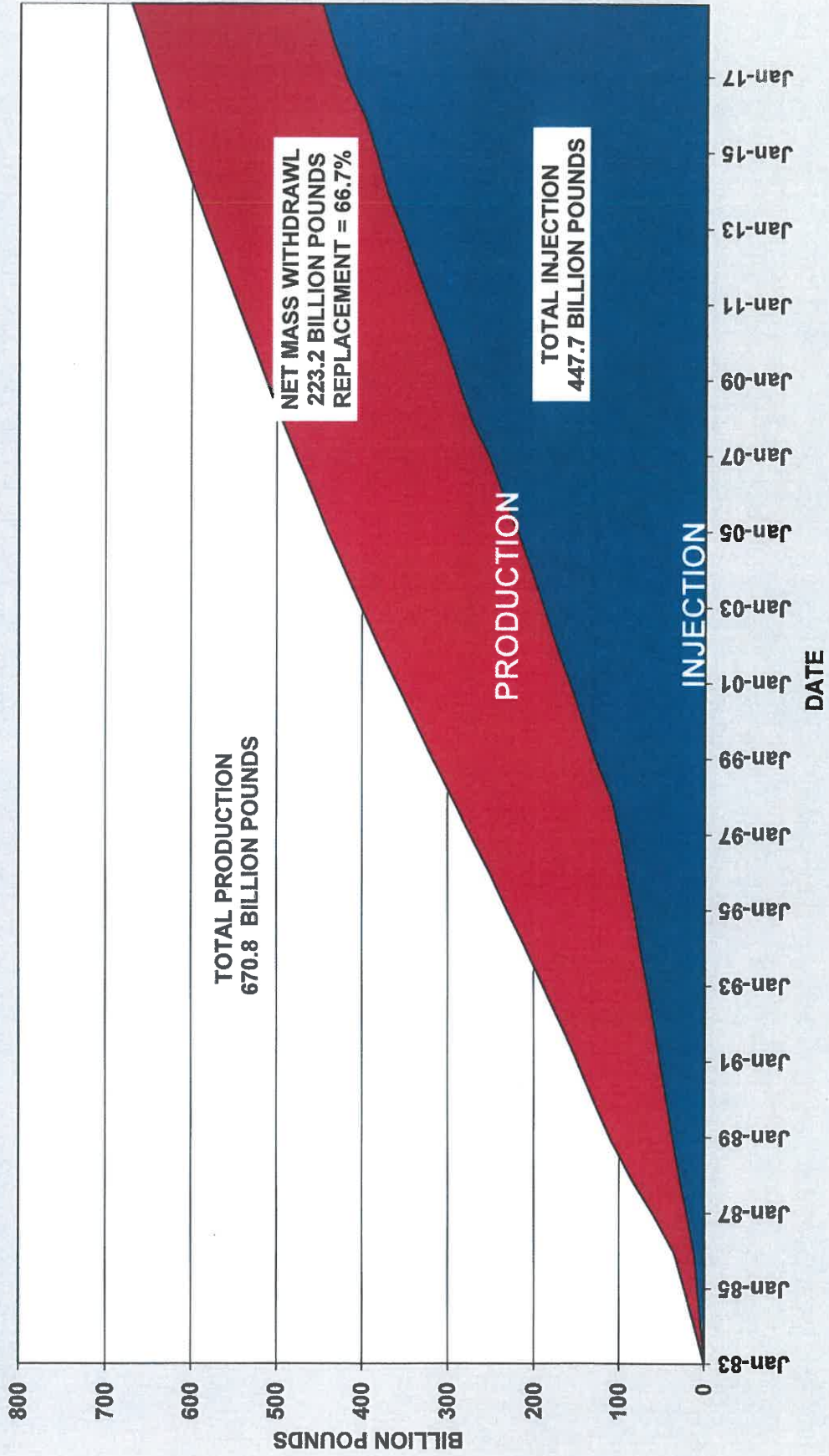
2018 Reservoir Performance Review

- Average shut-in wellhead pressure for the NCPA lease was 75.6 psig. The average well produces 24.3 kph at 40.8 psig.
- The steam field deliverability was 1,761 klbs/hr in 2018. The projected 2019 deliverability is 1,682 klbs/hr. The projected harmonic decline rate going forward is 1.9%.

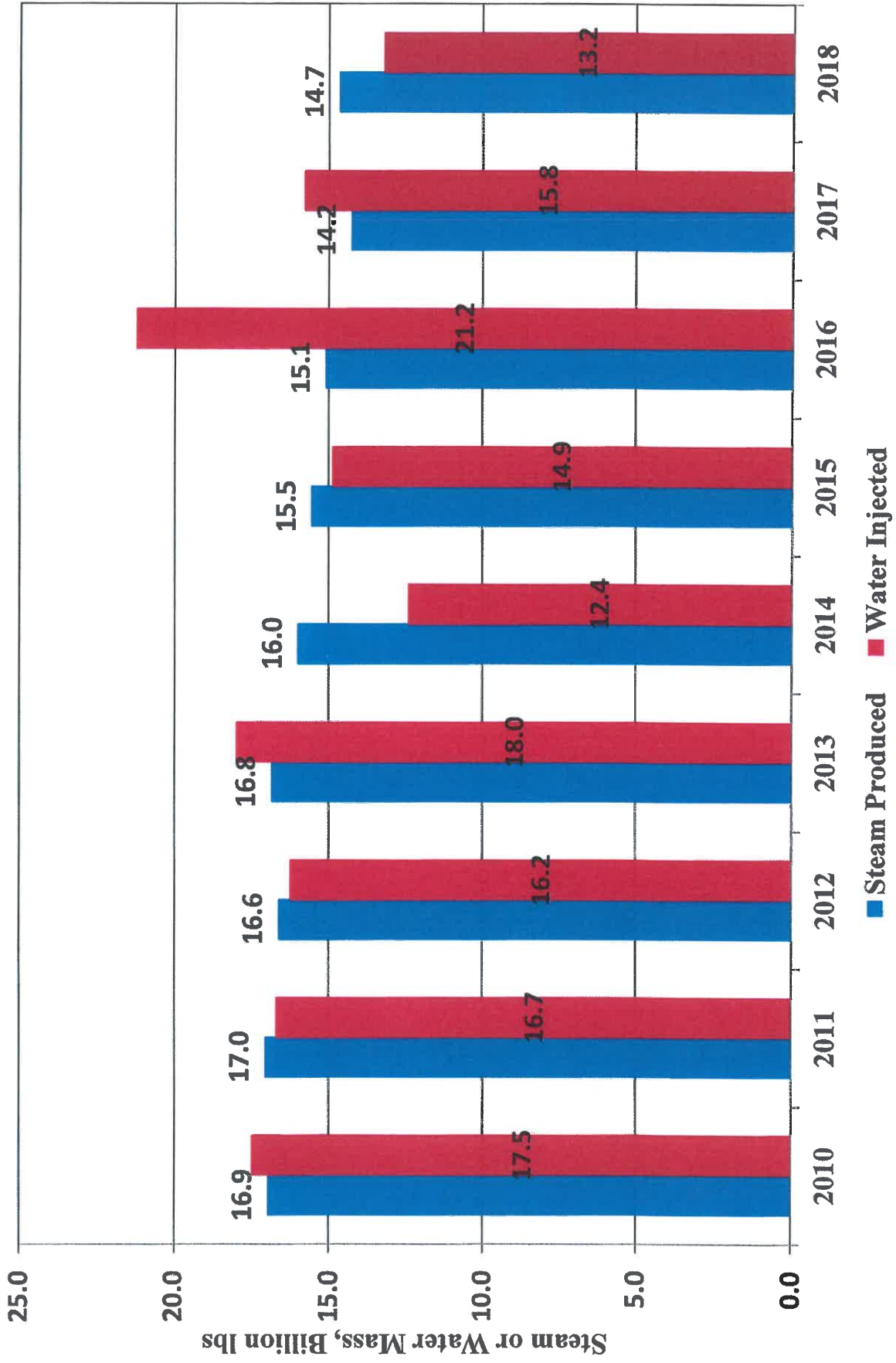
2018 Generation Review and 2019 Generation Forecast

- Net generation for 2018 was 804.4 GWhrs. For FY 2019, net generation is projected to be 760.3 GWhrs.
- The generation forecast covers the period from 2019-2043. Recoverable steam reserves are 297.2 billion pounds with the total amount of remaining net generation estimated at 15,311 GWhr.
- The gross generation capacity for 2019 is expected to be 92.4 MW or 82.4 MW net. Average generation levels will be reduced for two reasons. Units #1 and #2 of Plant #1 will be undergoing overhauls in in April and May 2019. In addition, steam production to Plant #2 will be reduced approximately 195 kph for three months while workovers will be conducted on P-Site.
- The net generation forecast for year 2019 is 716.9 GWhr net. For FY 2020, the net generation amount is projected to be 731.9 GWhrs.

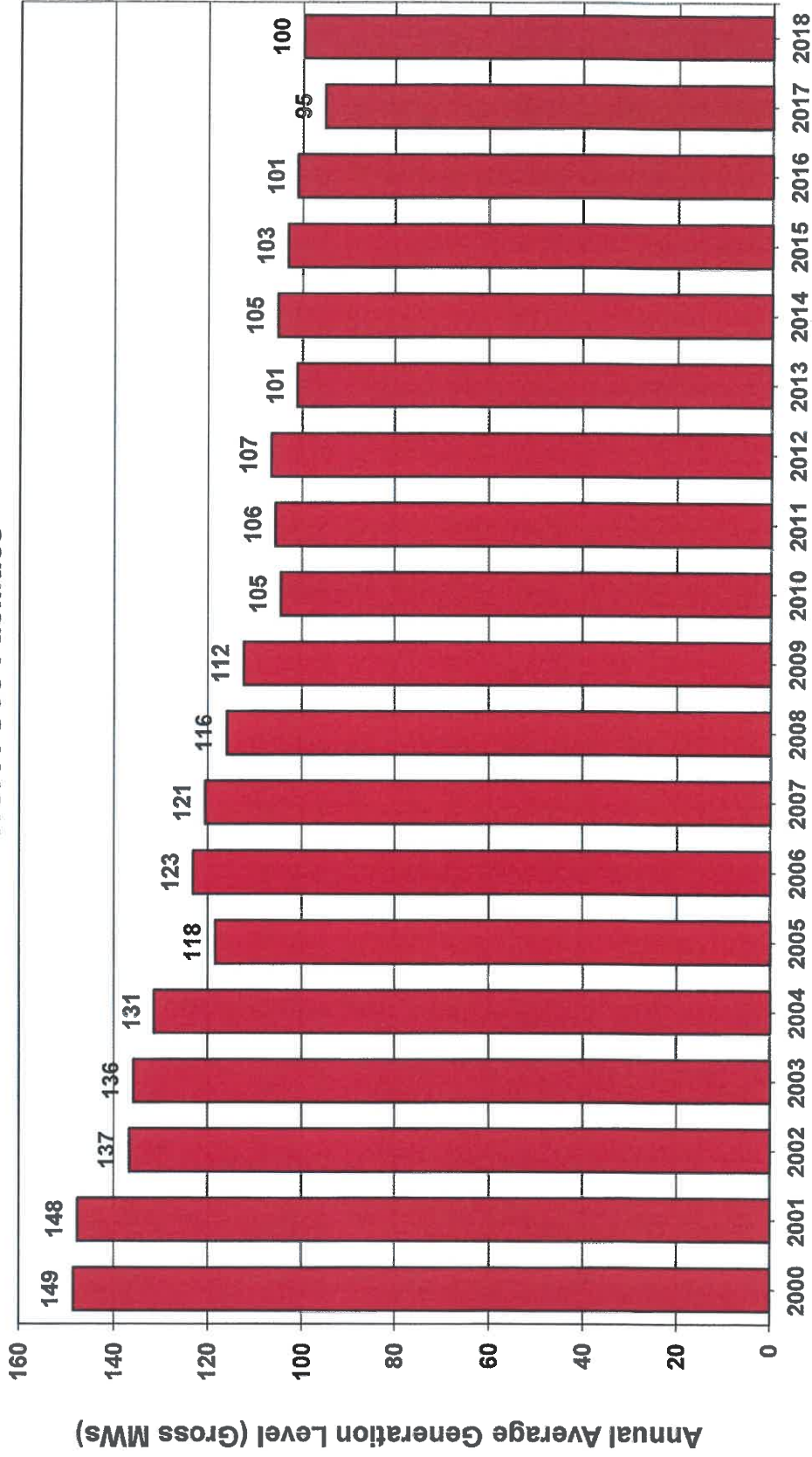
FIGURE 1
NCPA STEAMFIELD
CUMULATIVE PRODUCTION AND INJECTION



Historical NCPA Production and Injection Levels
Figure 2



**Figure 3. Historical Power Generation Levels
NCPA Geo Facilities**



*Generation levels include downtime for unit outages and overhauls

2018 Gross Steam Utilization

Figure 4

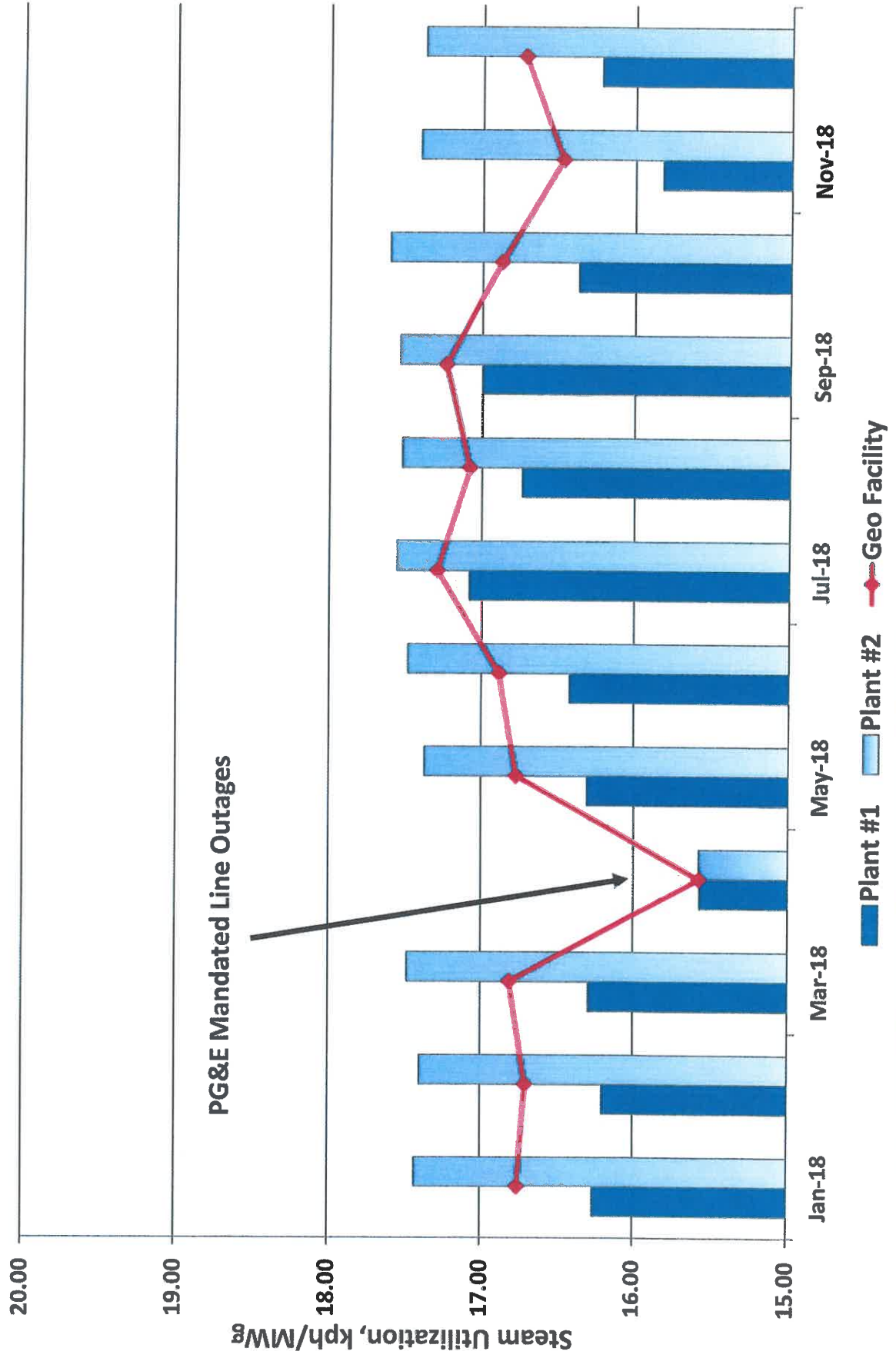
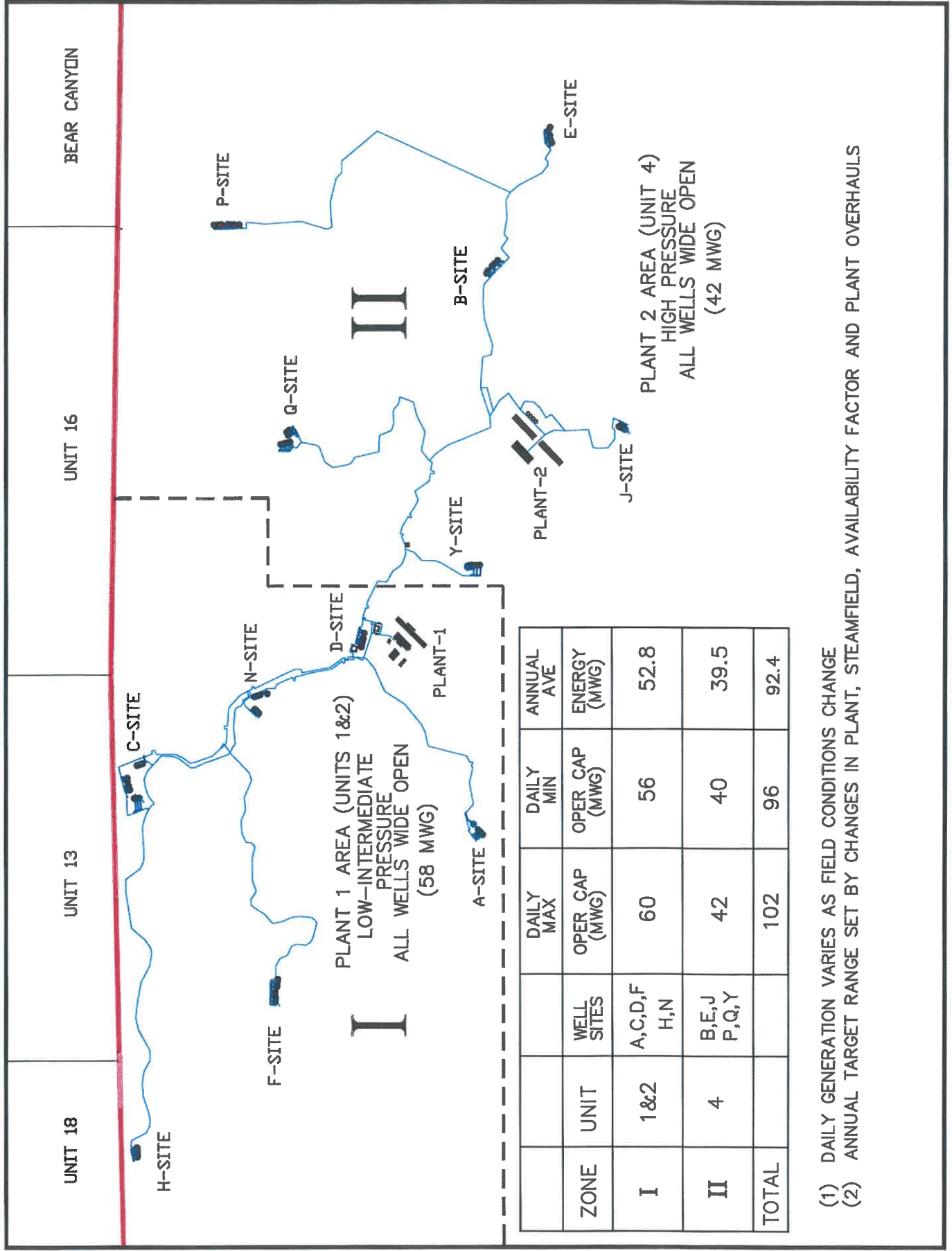


Figure 5. GEOTHERMAL OPERATIONAL PLAN 2019



- (1) DAILY GENERATION VARIES AS FIELD CONDITIONS CHANGE
- (2) ANNUAL TARGET RANGE SET BY CHANGES IN PLANT, STEAMFIELD, AVAILABILITY FACTOR AND PLANT OVERHAULS

**Figure 6. History of SEGEP Deliveries Total and NCPA
(Annual Average GPM)**

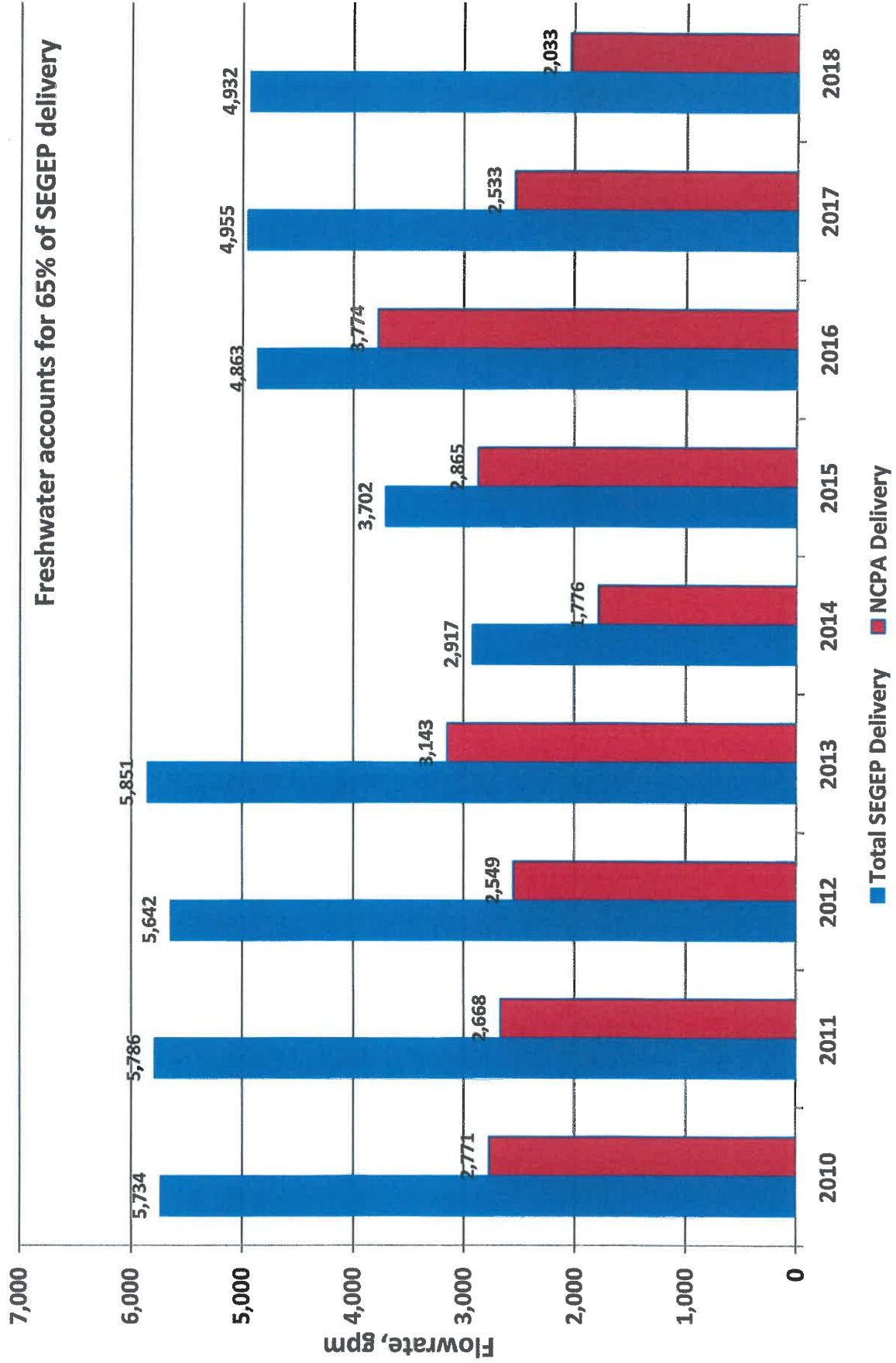


FIGURE 7 MODIFIED PLAN OF INJECTION

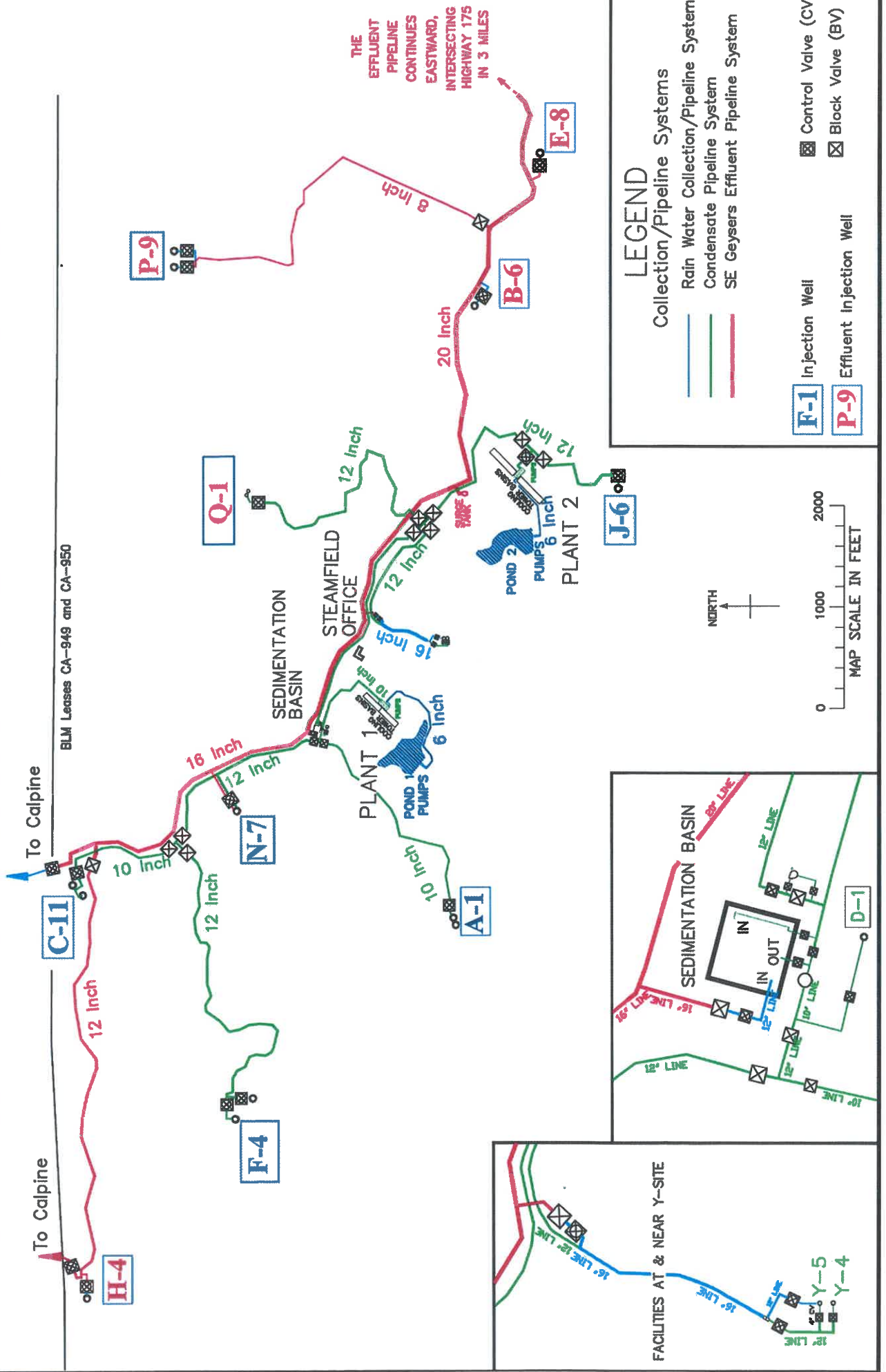
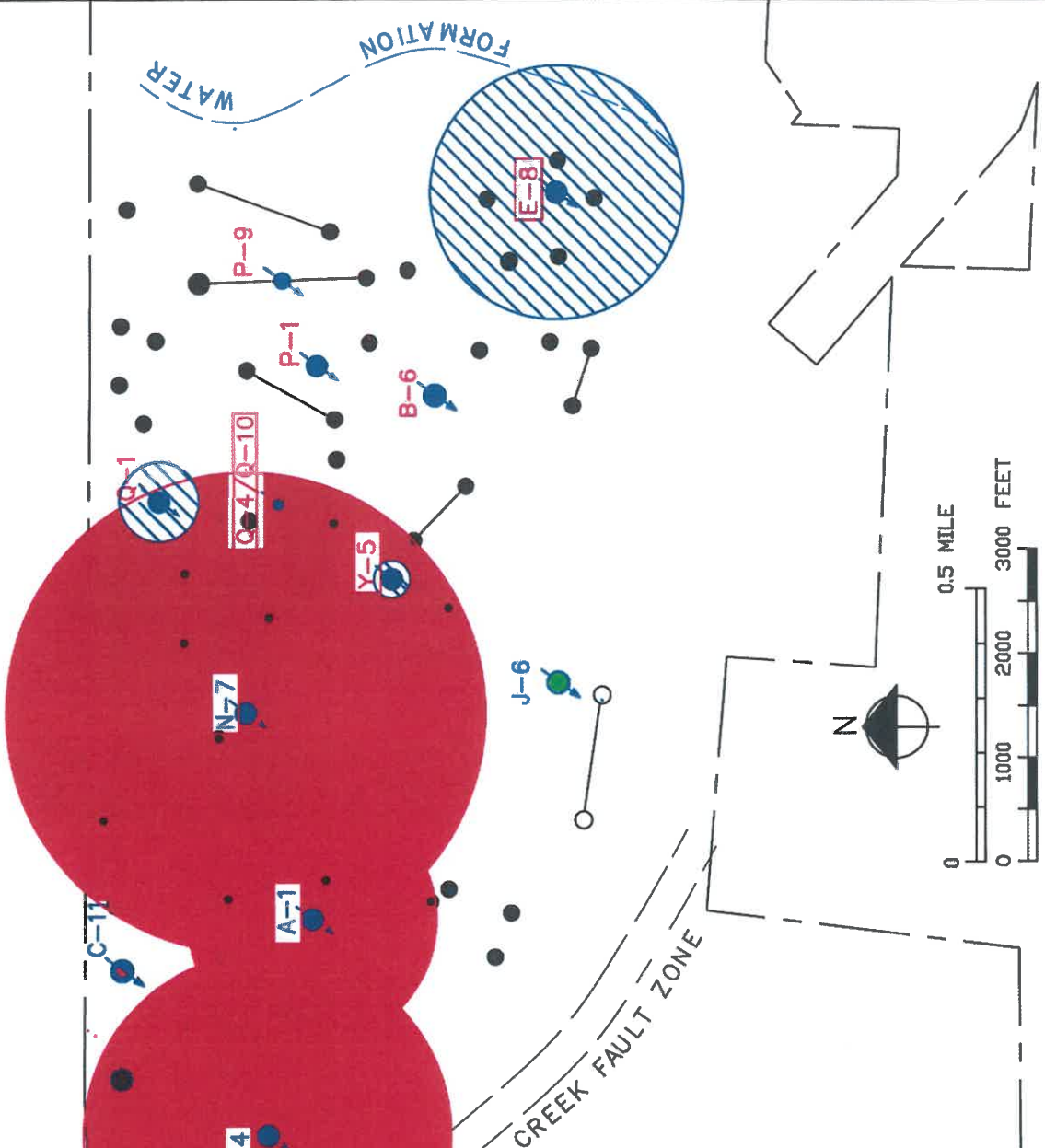


FIGURE 8 NCPA STEAM FIELD RELATIVE DISTRIBUTION OF INJECTED WATERS DURING 2018

CALPINE

CALPINE



LEGEND





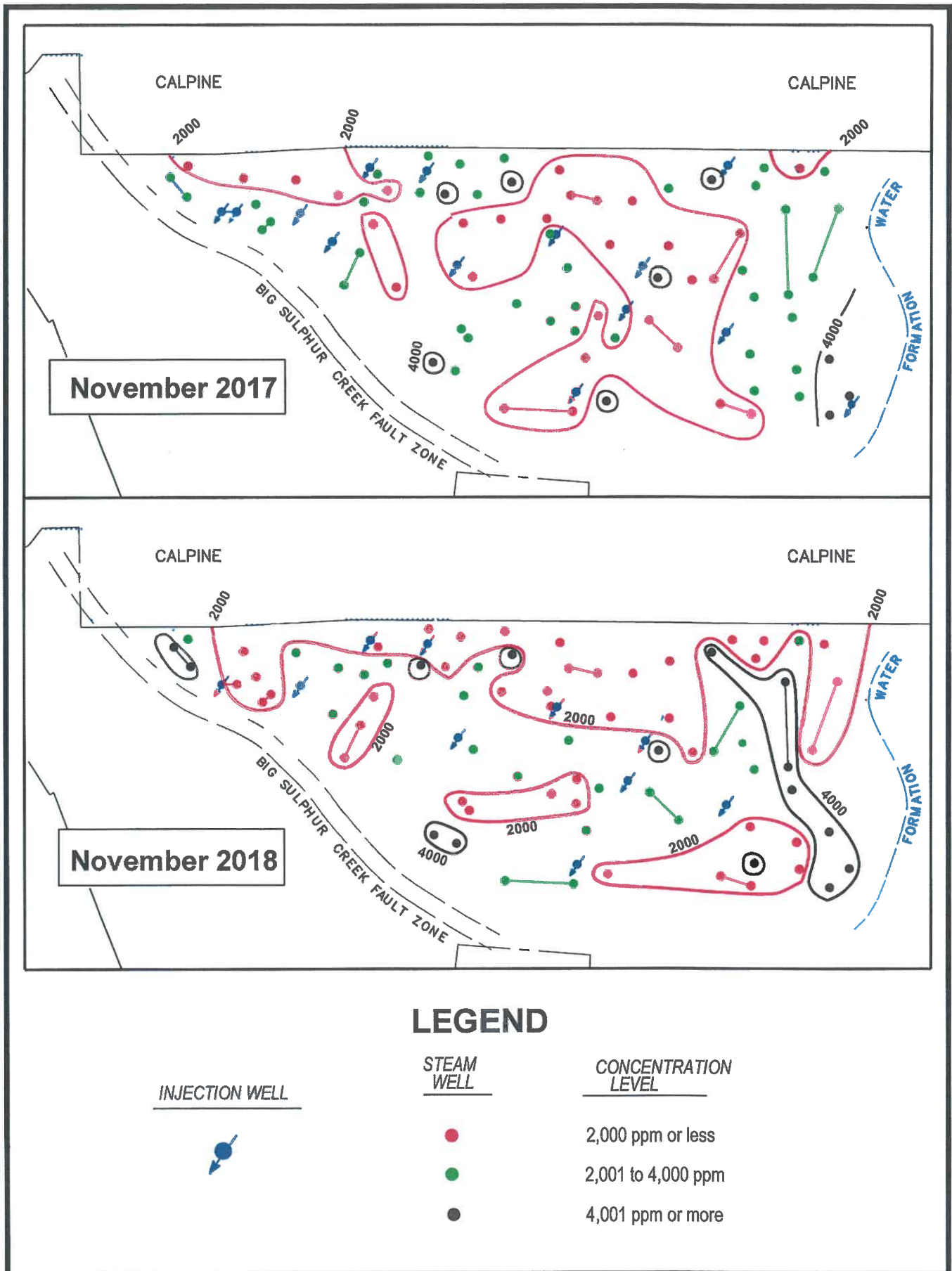
	Circle Area is Proportional to Volume Injected
	CONDENSATE INJECTION WELL
	EFFLUENT INJECTION WELL
	MIXED CONDENSATE AND EFFLUENT WATER INJECTION WELL
	STEAM PRODUCTION WELL LOCATION

FIGURE 10
NONCONDENSABLE GAS CONCENTRATIONS
IN NCPA STEAM (ppm)



LEGEND

INJECTION WELL



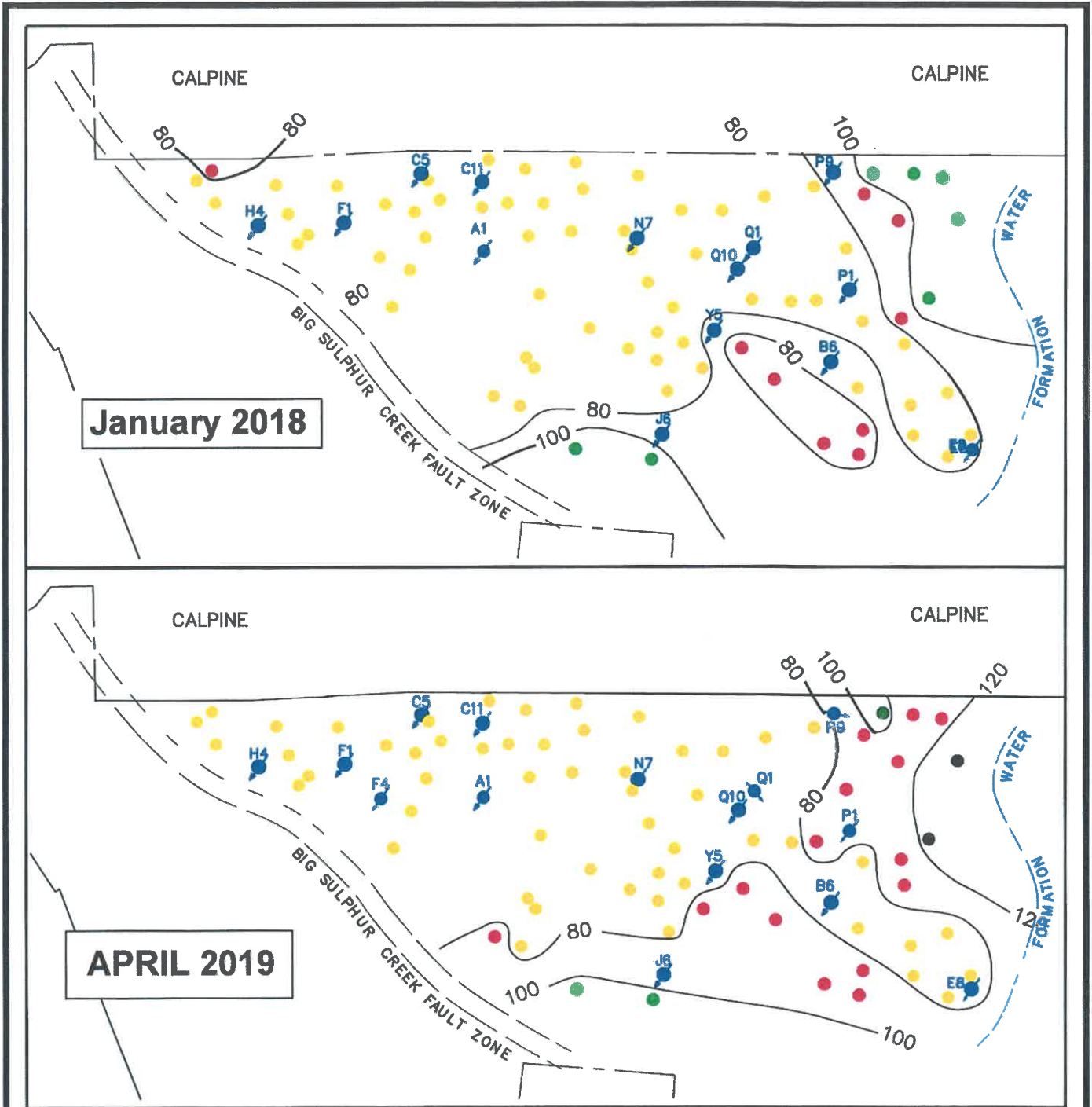
STEAM WELL

-
-
-

CONCENTRATION LEVEL

- 2,000 ppm or less
- 2,001 to 4,000 ppm
- 4,001 ppm or more

FIGURE 11
NCPA STEAM FIELD RESERVOIR PRESSURE

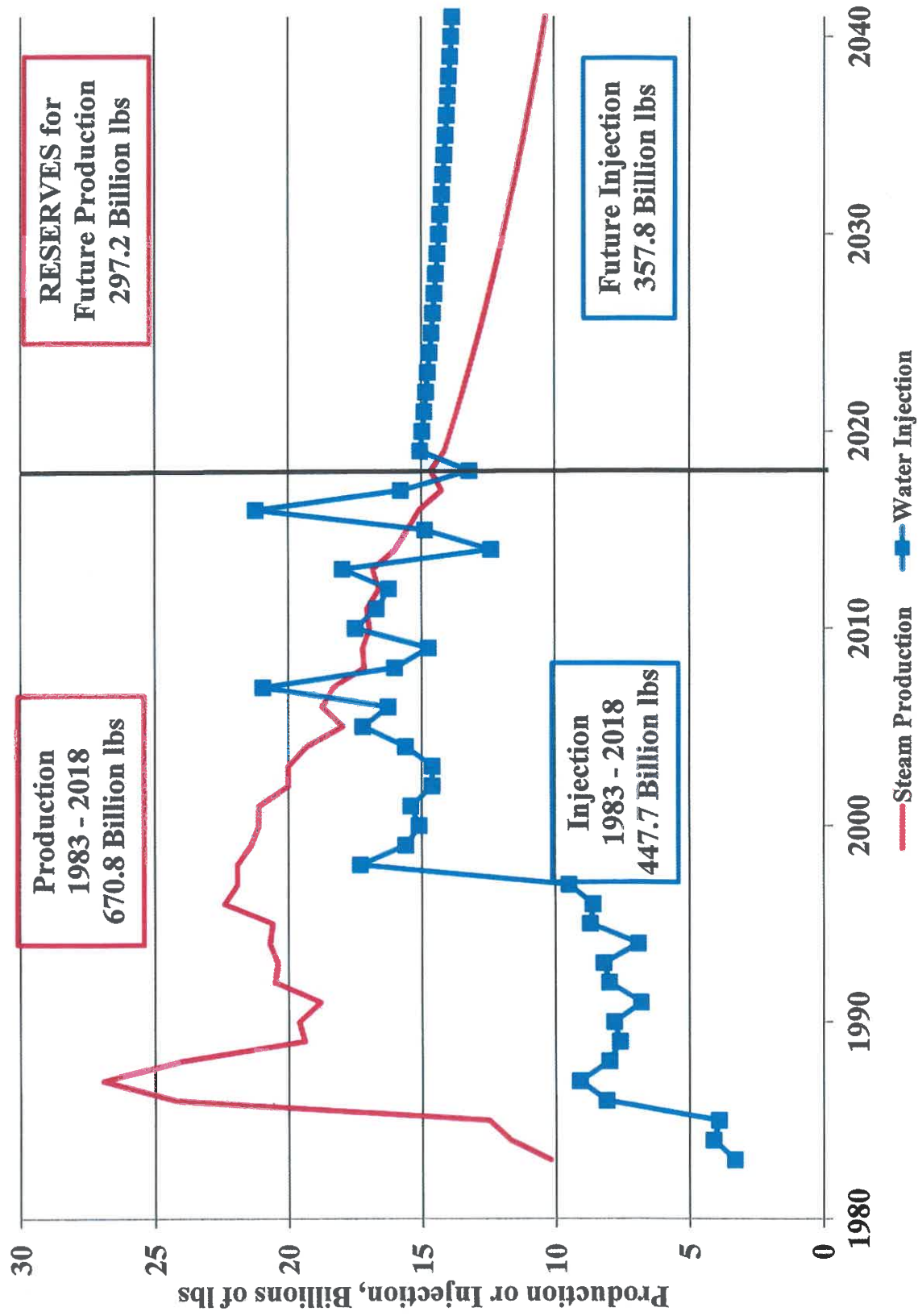


LEGEND

<u>ISOBARIC CONTOUR</u>	<u>AREA</u>	<u>STEAM WELL LOCATION</u>	<u>RESERVOIR PRESSURE (PSIG)</u>
	LOW	●	< 80
	MEDIUM LOW	●	80 - 100
	MEDIUM HIGH	●	101 - 120
	HIGH	●	> 120

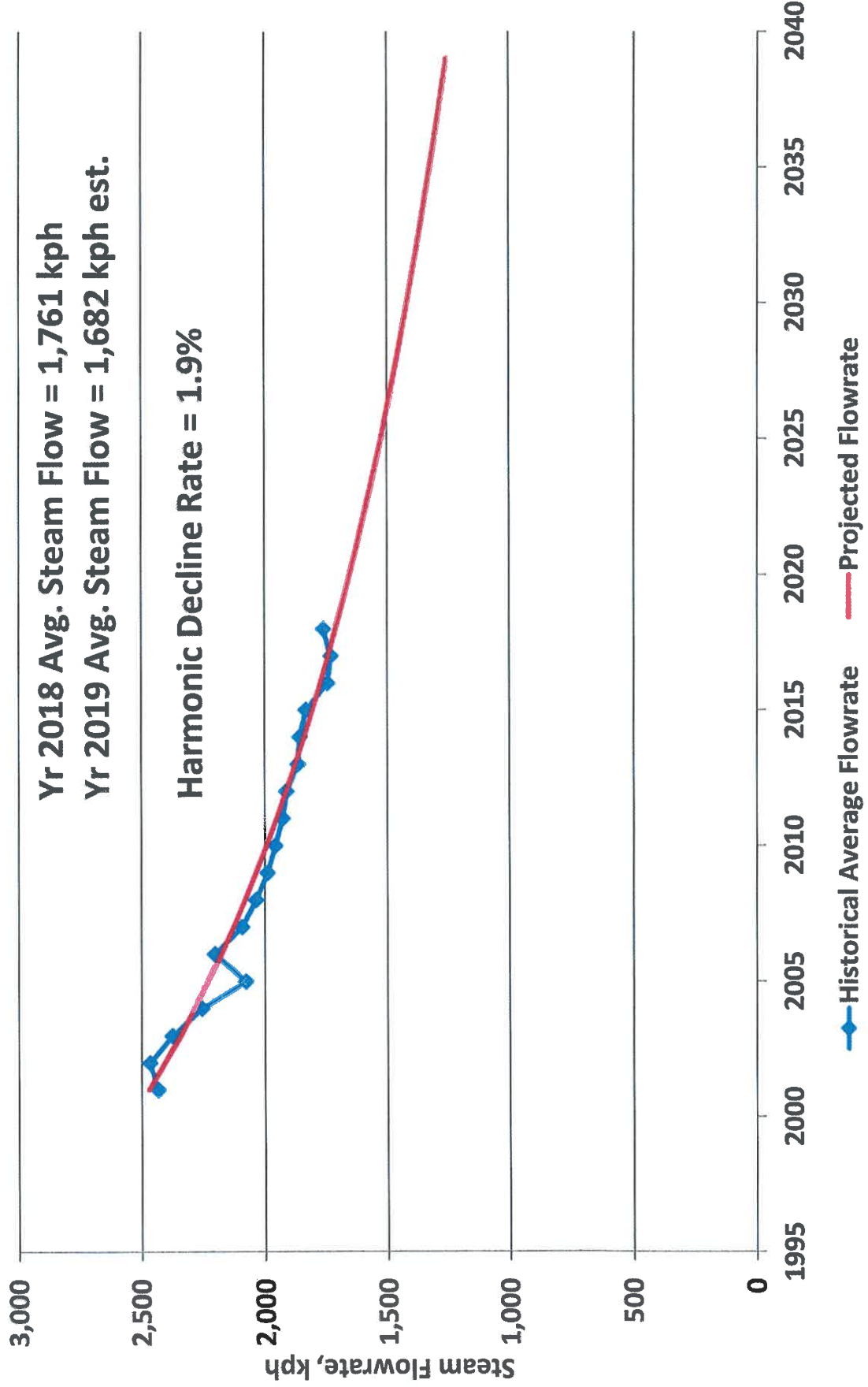
Historical and Forecast Steam Production & Water Injection

Figure 12



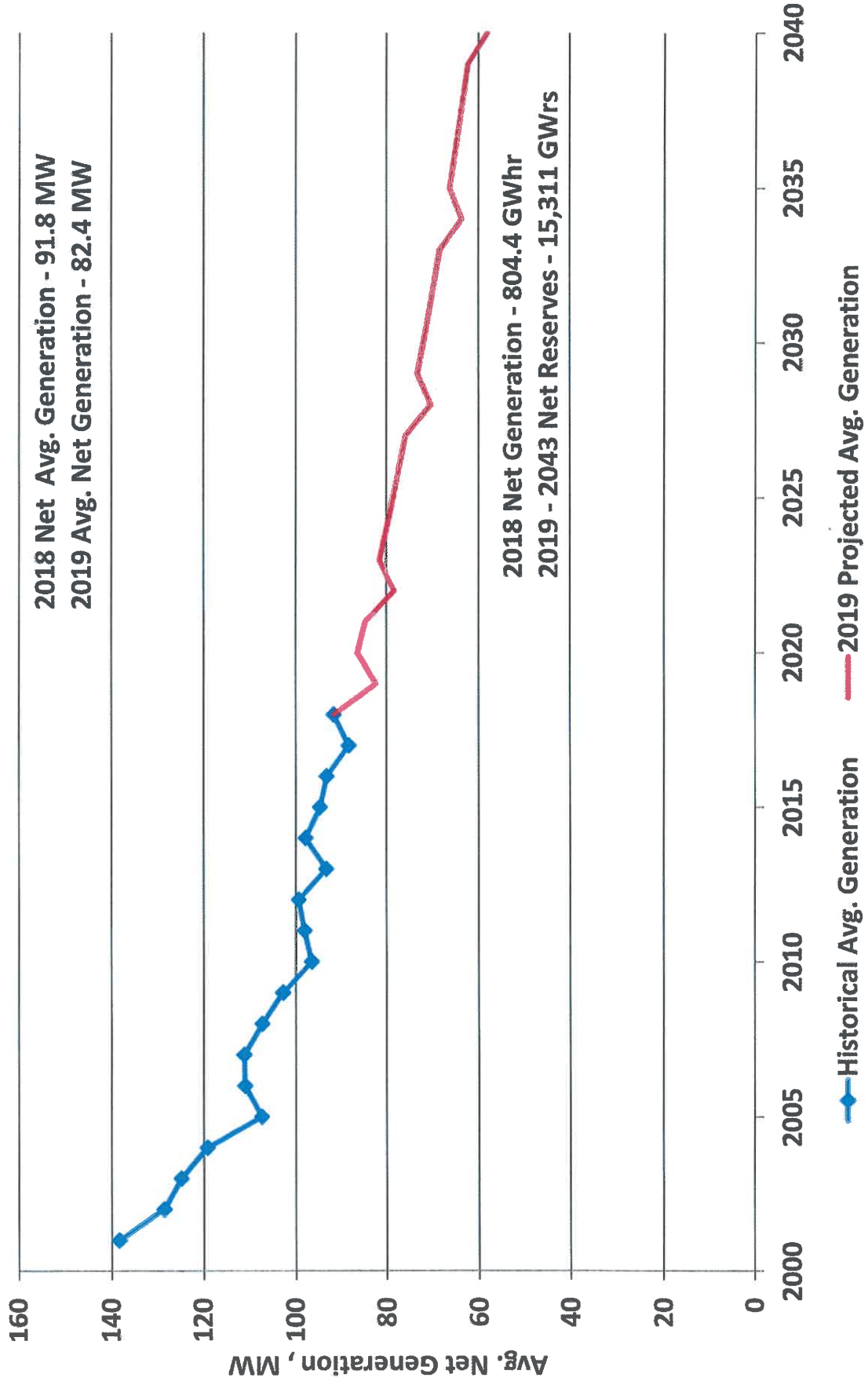
Historical and Projected Steam Flowrates Combined NCPA Plant #1 & #2

Figure 13



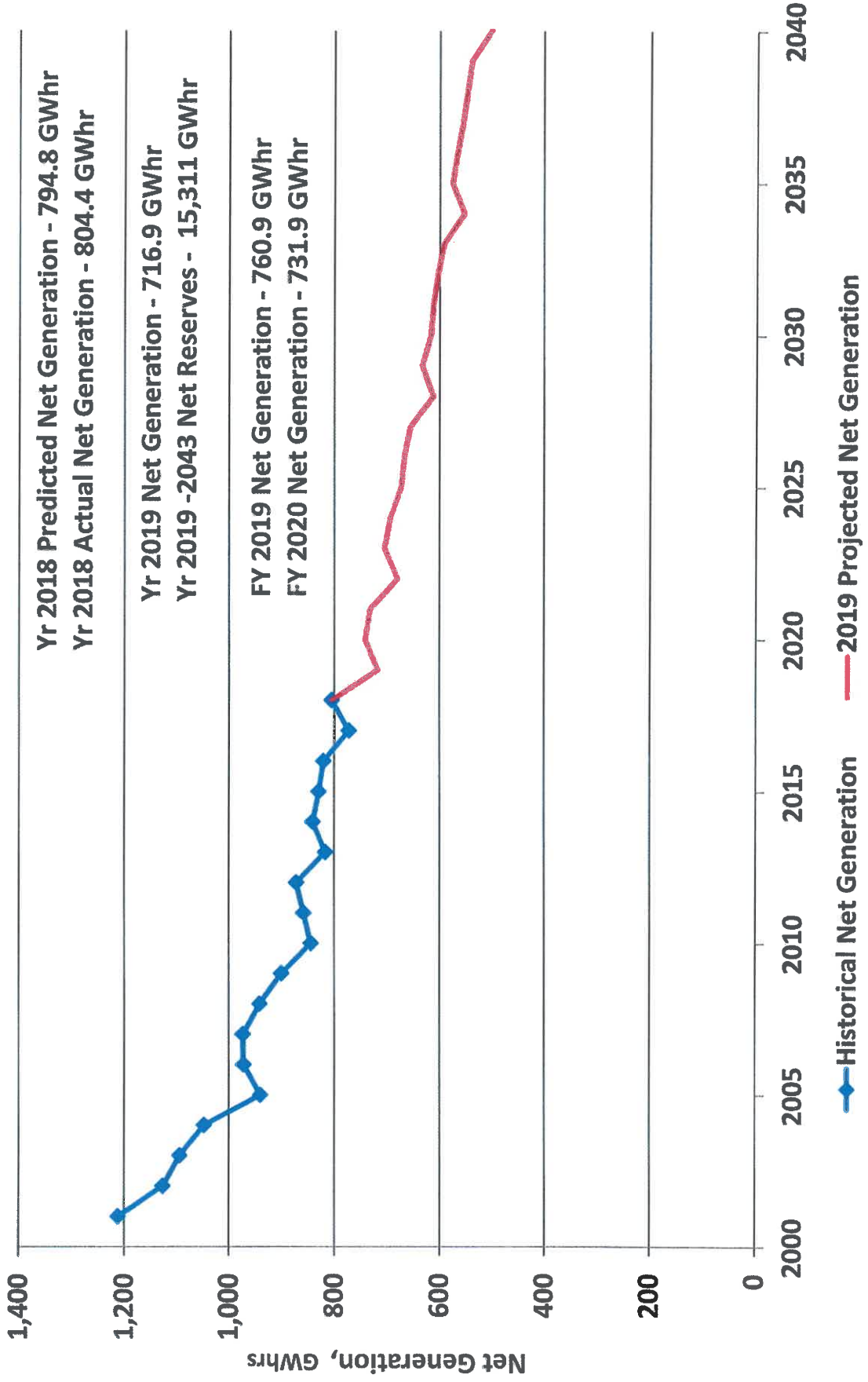
Historical and Projected Average Net Generation Level Combined NCPA Plants #1 & #2

Figure 14



Historical and Projected Net Generation Combined NCPA Plants #1 & #2

Figure 15



**Table 1. ANNUAL REPORT OF NCPA INJECTION AT THE GEYSERS STEAM FIELD
for Year 2018 (in 1000 Gallons)**

Well	for Year 2018 (in 1000 Gallons)												Condensate(1)	Effluent(2)	Well Total	
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18				
A-1	30,646	22,079	25,435	8,448	2,261	-	-	6,028	12,463	15,603	21,020	28,739	172,721	-	-	223,765
Effluent	2,554	4,013	503	1,134	473	-	-	5,293	11,393	10,772	9,077	5,831	51,044	-	-	87,186
B-6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Effluent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-8	24,615	28,133	32,488	24,019	17,283	1,160	809	8,949	25,990	28,353	23,548	12,984	228,231	-	-	228,231
F-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Effluent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F-4	23,246	18,806	30,647	29,170	26,254	18,160	16,045	14,856	11,505	17,879	17,243	19,003	242,613	-	-	329,799
Effluent	2,112	3,452	596	2,106	6,613	13,581	10,950	14,057	9,174	12,406	8,126	4,012	87,186	-	-	100,171
H-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
H-4	39,901	33,003	36,892	31,215	21,116	-	-	1,050	27,794	28,625	24,861	13,029	257,486	-	-	257,486
J-6	-	-	0	-	480	-	-	40	-	-	-	-	520	-	-	520
N-2	-	-	-	-	-	-	-	-	-	-	5,974	1,888	7,862	-	-	8,926
Effluent	-	-	-	-	-	-	-	-	-	-	431	633	1,064	-	-	1,064
N-7	18,169	3,607	18,701	8,076	13,321	9,944	3,491	3,433	3,824	1,606	139	15,860	100,171	-	-	431,601
Effluent	35,031	36,896	38,153	31,558	32,353	36,962	19,487	25,111	20,465	25,161	19,669	10,584	331,430	-	-	331,430
P-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-9	-	-	-	-	-	-	-	-	18	-	-	-	18	-	-	18
Q-1	15,149	20,888	18,494	14,000	-	-	-	-	-	-	-	3,181	71,712	-	-	71,712
Q-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q-7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q-10	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
Effluent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Y-5	-	1,514	13,082	3,549	-	-	-	-	-	10,648	4,023	841	33,657	-	-	33,657
Totals	191,423	172,391	214,991	153,275	120,154	79,807	50,782	78,517	122,626	151,053	134,111	116,585	523,886	1,061,829	1,585,715	1,585,715

During each month the % of Effluent Pipeline water that was fresh water withdrawn from Clear Lake: **68%**

Notes: 1. "Effluent" (pipeline) volumes are water from Clear Lake together with LACOSAN and Clearlake Oaks treated wastewater.
 2. The 9 Bold well names in **italics** are located in Lake County (Central Valley Region), the 10 others are in Sonoma County (North Coast Region).

**TABLE 2. GEOTHERMAL FACILITIES
Summary Table**

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Generation (gross)										
(MWh)	981,100	916,437	926,368	936,868	886,004	922,995	903,299	887,299	833,211	874,403
(MW)	112.0	104.6	105.7	106.7	101.1	105.4	103.1	101.0	95.1	99.8
Generation (net)										
(MWh)	900,599	844,642	858,747	872,422	816,824	862,842	837,379	819,149	772,398	804,425
(MW)	102.8	96.4	98.0	99.3	93.2	98.5	95.6	93.3	88.2	91.8
Protocol										
(MW gross)	113	108	108	108	108	107	107	107	105	105
Steam Conversion										
(Lbs / Kw)	17.53	18.33	18.39	17.72	18.99	17.33	17.20	17.00	17.10	16.76
Steam Delivered										
(Billion Lbs)	17.2	16.8	17.04	16.60	16.83	16.00	15.54	15.08	14.24	14.65
Load Flexibility (gross)										
Monthly High (MW)	117	109	109	110	109	110	110	109.78	103.10	105.31
Monthly Low (MW)	108	63	106	105	82	104	104	103.00	76.70	82.79
Injection										
Total (Billion Lbs)	14.74	17.45	16.66	16.22	17.96	12.39	14.86	21.21	15.78	13.19
Condensate (Billion Lbs)	2.87	4.96	4.79	5.00	4.21	4.62	4.20	4.94	4.64	4.36
Effluent (Billion Lbs)	9.82	12.13	11.82	11.18	13.75	7.77	12.50	16.27	11.13	8.83
Mass Replacement										
Annual (%)	85.7%	103.9%	97.8%	97.7%	106.7%	77.5%	95.6%	140.6%	110.8%	90.0%
Cumulative (%)	57.2%	58.6%	59.8%	60.9%	62.2%	62.6%	63.4%	65.2%	66.2%	66.7%
Wells Used For Injection										
	8	11	15	15	13	12	13	11	10	10
NCPA Micro-seismic Activity M_p >= 1.5										
	49	55	73	81	68	58	50	64	66	57
NCPA Micro-seismic Activity Maximum Magnitude Event										
	2.64	2.99	3.3	2.91	3.76	4.38	2.99	3.37	2.92	3.09
NGC Concentration (ppmw)										
	2,395	2,785	2,950	3,097	3,248	3,069	3,176	3,376	3,108	3,356

Table 3
RESERVOIR PRESSURE
BY WELL 2019

WELL	PRESS	WELL	PRESS	WELL	PRESS	WELL	PRESS
A-3	82.5	D-1	65.1	H-1	71.3	P-1	
A-4	74.1	D-2	77.8	H-2	83.6	P-2	106.5
A-5	77.6	D-6	74.3	H-3	72.3	P-4	81.1
A-6	74.2	D-7	66.7	H-4		P-5	96.1
A-SITE	77.1	D-8	76.6	H-5	69.3	P-6	85.3
		D-SITE	72.1	H-SITE	74.1	P-7	84.5
B-2	75.4			J-2	80.6	P-8	146.5
B-3	76.6	E-1	73.4	J-3	92.1	P-9	
B-4	74.1	E-2	76.5	J-4	100.2	P-SITE	100.0
B-5	72.9	E-3	85.5	J-5	114.7		
B-6		E-4	72.9	J-SITE	96.9	Q-1	
B-SITE	74.8	E-5	74.8			Q-3	65.4
		E-6	74.4			Q-4	64.4
C-1	63.3	E-8				Q-5	72.2
C-2	64.9	E-SITE	76.6			Q-6	71.5
C-4	65.8			N-1	66.2	Q-7	70.5
C-5	63.8	F-1	68.8	N-2	79.8	Q-8	72.0
C-6	62.2	F-2	71.4	N-3	68.6	Q-9	83.2
C-7	62.2	F-3	72.3	N-4	67.6	Q-SITE	68.8
C-8	70.1	F-4	74.8	N-5	67.7		
C-9	69.0	F-5	71.2	N-6	68.9	Y-1	68.7
C-10	54.5	F-6	69.5	N-SITE	69.8	Y-2	66.9
C-SITE	64.0	F-7				Y-3	75.1
		F-SITE	71.3			Y-4	
						Y-5	
						Y-SITE	70.2

WELLS NOTED IN RED ARE ESTIMATED VALUES FROM PAST DATA

VALUES ARE FROM PRESSURE BUILD- UP TESTS

AVE. WELL PRESS EQUALS	75.6 psig
AVE SITE PRESS EQUALS	76.3 psig
AVE. FLOWRATE = 24.3 kph at	40.8 psig

TABLE 4 NCG CONCENTRATIONS (PPMW) 2018 BY WELL, AND SITE AND PROJECT							
WELL		NCG		WELL		NCG	
A-3	7667	D-1	2504	H-1	2536	P-1	
A-4	2958	D-2	2589	H-2	1041	P-2	2937
A-5	1762	D-6	2993	H-3	4689	P-4	1673
A-6	2380	D-7	745	H-4		P-5	1382
A-SITE	3692	D-8	1917	H-5	3426	P-6	2739
		D-SITE	1805	H-SITE	2923	P-7	4344
B-2	3472					P-8	3657
B-3	4736	E-1	9621	J-2	4159	P-9	
B-4	3135	E-2	2872	J-3	920	P-SITE	2789
B-5	2168	E-3	4154	J-4	2553		
B-6		E-4	4873	J-5	852	Q-1	
B-SITE	3378	E-5	8104	J-SITE	2121	Q-3	4898
		E-6	3547			Q-4	2481
C-1	2784	E-SITE	5529	N-1	2511	Q-5	2563
C-2	4151			N-2	1555	Q-6	2225
C-4	3786	F-1	1203	N-3	1302	Q-7	9723
C-5	13976	F-2	2319	N-4	2233	Q-8	2616
C-6	3766	F-3	3812	N-5	1777	Q-9	3025
C-7	3847	F-4		N-6	3815	Q-A	
C-8	1646	F-5	622	N-SITE	2199	Q-SITE	3933
C-9	5824	F-6	1629			Y-1	2455
C-A	3370	F-7	1847			Y-2	4741
C-SITE	4794	F-SITE	1905			Y-3	3650
						Y-4	2895
						Y-5	
						Y-SITE	3435
VALUES ARE FROM NCPA CHEM LAB ANALYSIS							
Number of wells samples wells sampled=						65	
AVG. WELL NCG =						3356	
AVG. SITE NCG =						3209	
NCG Flow Weighted Avg. =						3190	

**2019 Generation - 25 Year Forecast
Table 5**

Year	Total Geo Facilities		Plant #1		Plant #2	
	Gross	Net	Gross	Net	Gross	Net
	Generation GWhr	Generation GWhr	Generation GWhr	Generation GWhr	Generation GWhr	Generation GWhr
2019	804.0	716.9	461.5	396.6	342.5	320.3
2020	827.8	740.8	480.0	415.0	347.8	325.8
2021	818.9	731.7	472.2	407.4	346.7	324.3
2022	764.6	679.1	466.0	401.2	298.6	277.9
2023	795.5	704.5	463.8	395.1	331.8	309.4
2024	784.7	693.4	459.0	390.2	325.7	303.2
2025	759.2	672.4	448.1	383.3	311.0	289.1
2026	754.1	666.9	442.5	377.6	311.7	289.3
2027	742.4	655.2	436.9	372.1	305.5	283.1
2028	700.9	611.6	436.3	367.7	264.6	243.9
2029	723.6	632.8	429.8	361.4	293.8	271.4
2030	703.0	616.2	421.0	356.2	282.0	260.1
2031	699.0	611.8	416.0	351.1	283.0	260.6
2032	690.9	603.4	412.1	347.1	278.7	256.2
2033	682.6	592.0	409.6	341.4	273.0	250.6
2034	641.1	552.2	404.8	336.6	236.3	215.6
2035	662.7	575.3	396.8	332.0	265.9	243.3
2036	653.3	565.8	393.3	328.3	260.0	237.5
2037	642.8	555.5	387.8	323.0	255.0	232.6
2038	637.5	547.1	386.7	318.7	250.8	228.4
2039	629.2	538.8	382.4	314.4	246.8	224.4
2040	585.2	500.4	375.0	310.2	210.2	190.3
2041	611.8	524.3	371.9	306.9	239.8	217.3
2042	602.4	515.2	366.9	302.1	235.5	213.1
2043	598.0	507.7	366.0	298.2	231.9	209.5

Notes:

1. Assumes 3 unit operation.
2. Steam Reserves: 297.2 Billion lb.
3. Gross Reserves: 17,515 GWhr
4. Net Reserves: 15,311 GWhr
5. Plant #1 Auxiliary Load is fixed at 7.5 MW.
Plant #2 Auxiliary Load is fixed at 2.58 MW.
6. Plant availability is 99.5% or a forced outage rate of 43.8 hrs per year.
7. See Table 5B for scheduled outages.

**2019 Generation Capacity - 25 Year Forecast
Table 5A**

Year	Plant #1		Plant #2		Total	
	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net
	Gen. MW	Gen. MW	Gen. MW	Gen. MW	Gen. MW	Gen. MW
2019	52.8	45.4	39.5	36.9	92.4	82.4
2020	55.4	47.9	41.0	38.4	96.4	86.3
2021	54.6	47.1	40.1	37.5	94.7	84.7
2022	53.9	46.4	34.3	31.9	88.2	78.3
2023	53.2	45.7	38.4	35.8	91.6	81.5
2024	52.5	45.0	37.6	35.0	90.1	80.0
2025	51.8	44.3	36.8	34.2	88.6	78.6
2026	51.2	43.7	36.1	33.5	87.2	77.2
2027	50.5	43.0	35.3	32.8	85.9	75.8
2028	49.9	42.4	30.3	27.9	80.2	70.3
2029	49.3	41.8	34.0	31.4	83.3	73.2
2030	48.7	41.2	33.4	30.8	82.1	72.0
2031	48.1	40.6	32.7	30.2	80.9	70.8
2032	47.5	40.0	32.2	29.6	79.7	69.6
2033	47.0	39.5	31.6	29.0	78.6	68.5
2034	46.4	38.9	27.1	24.8	73.6	63.7
2035	45.9	38.4	30.5	27.9	76.4	66.3
2036	45.4	37.9	30.0	27.4	75.4	65.3
2037	44.9	37.4	29.5	26.9	74.4	64.3
2038	44.4	36.9	29.0	26.4	73.4	63.3
2039	43.9	36.4	28.6	26.0	72.4	62.3
2040	43.4	35.9	24.6	22.2	68.0	58.1
2041	42.9	35.4	27.7	25.1	70.6	60.5
2042	42.4	34.9	27.2	24.7	69.7	59.6
2043	42.0	34.5	26.8	24.2	68.8	58.7

* Average generation levels plants are capable of achieving.

**2019 Scheduled Outages - 25 Year Forecast
Table 5B**

Year	Plant #1		Plant #2
	Unit 1 Scheduled Outages hrs	Unit 2 Scheduled Outages hrs	Unit 4 Scheduled Outages hrs
2019	672	672	72
2020	72	72	72
2021	72	72	72
2022	72	72	1008
2023	72	72	72
2024	72	72	72
2025	672	672	72
2026	72	72	72
2027	72	72	72
2028	72	72	1008
2029	72	72	72
2030	72	72	72
2031	672	672	72
2032	72	72	72
2033	72	72	72
2034	72	72	1008
2035	72	72	72
2036	72	72	72
2037	672	672	72
2038	72	72	72
2039	72	72	72
2040	72	72	1008
2041	72	72	72
2042	72	72	72
2043	672	672	72

2018 Generation - 5 Year Forecast
Table 6

Date	Total Geo Facilities		Plant #1		Plant #2	
	Gross	Net	Gross	Net	Gross	Net
	Generation GWHr	Generation GWHr	Generation GWHr	Generation GWHr	Generation GWHr	Generation GWHr
Jan-19	77.7	67.8	44.8	36.7	32.9	31.1
Feb-19	68.7	60.2	39.1	32.2	29.6	28.0
Mar-19	75.3	65.7	45.9	38.0	29.4	27.7
Apr-19	52.2	48.8	22.0	20.5	30.2	28.4
May-19	54.8	50.7	23.6	21.5	31.2	29.3
Jun-19	62.4	55.2	40.2	34.9	22.1	20.3
Jul-19	64.4	56.9	41.5	36.0	22.8	20.9
Aug-19	64.2	56.8	41.5	35.9	22.8	20.8
Sep-19	70.0	62.8	40.1	34.7	29.9	28.1
Oct-19	72.3	64.8	41.4	35.8	30.9	29.0
Nov-19	69.8	62.6	40.0	34.6	29.8	28.0
Dec-19	72.1	64.6	41.3	35.7	30.8	28.8
Jan-20	71.9	64.5	41.2	35.7	30.7	28.8
Feb-20	67.2	60.2	38.5	33.3	28.7	26.9
Mar-20	71.7	64.3	41.2	35.6	30.6	28.7
Apr-20	54.5	48.5	35.8	31.0	18.7	17.5
May-20	71.5	64.1	41.1	35.5	30.5	28.5
Jun-20	69.1	61.9	39.7	34.3	29.4	27.6
Jul-20	71.3	63.8	41.0	35.4	30.3	28.4
Aug-20	71.2	63.7	40.9	35.4	30.3	28.4
Sep-20	68.8	61.6	39.6	34.2	29.3	27.4
Oct-20	71.0	63.5	40.8	35.3	30.2	28.3
Nov-20	68.6	61.4	39.5	34.1	29.1	27.3
Dec-20	70.8	63.3	40.7	35.2	30.1	28.1
Jan-21	70.7	63.2	40.7	35.1	30.0	28.1
Feb-21	63.8	57.0	36.7	31.7	27.0	25.3
Mar-21	67.6	60.3	40.6	35.1	27.0	25.3
Apr-21	64.2	57.5	35.3	30.5	28.9	27.0
May-21	70.3	62.8	40.5	35.0	29.8	27.9
Jun-21	67.9	60.7	39.2	33.8	28.8	26.9
Jul-21	70.1	62.6	40.4	34.9	29.7	27.7
Aug-21	70.0	62.5	40.4	34.8	29.6	27.7
Sep-21	67.6	60.4	39.0	33.7	28.6	26.7
Oct-21	69.8	62.3	40.3	34.7	29.5	27.6
Nov-21	67.4	60.2	38.9	33.6	28.5	26.6
Dec-21	69.6	62.1	40.2	34.6	29.4	27.5
Jan-22	69.5	62.0	40.2	34.6	29.3	27.4
Feb-22	62.7	55.9	36.2	31.2	26.4	24.7
Mar-22	40.1	34.5	40.1	34.5	0.0	0.0
Apr-22	49.0	42.3	34.8	30.0	14.1	12.3
May-22	69.1	61.6	40.0	34.4	29.1	27.2
Jun-22	66.8	59.5	38.6	33.3	28.1	26.3
Jul-22	68.9	61.4	39.9	34.3	29.0	27.1
Aug-22	68.8	61.3	39.8	34.3	29.0	27.0
Sep-22	66.5	59.3	38.5	33.1	28.0	26.1
Oct-22	68.6	61.1	39.8	34.2	28.9	26.9
Nov-22	66.3	59.1	38.4	33.1	27.9	26.0
Dec-22	68.4	60.9	39.7	34.1	28.7	26.8
Jan-23	68.3	60.9	39.6	34.1	28.7	26.8
Feb-23	61.6	54.9	35.7	30.7	25.9	24.1
Mar-23	65.4	58.1	39.5	34.0	25.8	24.1
Apr-23	65.8	55.3	38.2	29.6	27.6	25.8
May-23	68.0	60.5	39.5	33.9	28.5	26.6
Jun-23	65.7	58.4	38.1	32.8	27.5	25.7
Jul-23	67.8	60.3	39.4	33.8	28.4	26.5
Aug-23	67.7	60.2	39.3	33.8	28.3	26.4
Sep-23	65.4	58.2	38.0	32.6	27.4	25.5
Oct-23	67.5	60.0	39.2	33.7	28.2	26.3
Nov-23	65.2	58.0	37.9	32.6	27.3	25.4
Dec-23	67.3	59.8	39.2	33.6	28.1	26.2

2019 Generation Capacity - 5 Year Forecast*

Table 6A

Year	Plant #1		Plant #2		Total	
	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net
	Gen. MW	Gen. MW	Gen. MW	Gen. MW	Gen. MW	Gen. MW
Jan-19	60.2	49.3	44.3	41.8	104.4	91.1
Feb-19	58.2	48.0	44.1	41.6	102.3	89.6
Mar-19	61.7	51.1	42.3	39.7	104.0	90.8
Apr-19	30.5	28.4	42.2	39.6	72.7	68.0
May-19	31.8	28.9	42.1	39.5	73.9	68.4
Jun-19	56.2	48.7	30.9	28.3	87.1	77.0
Jul-19	56.1	48.6	30.8	28.2	86.9	76.8
Aug-19	56.0	48.5	30.7	28.2	86.8	76.7
Sep-19	56.0	48.5	41.8	39.2	97.8	87.7
Oct-19	55.9	48.4	41.7	39.1	97.6	87.5
Nov-19	55.8	48.3	41.6	39.0	97.5	87.4
Dec-19	55.8	48.3	41.6	39.0	97.3	87.2
Jan-20	55.7	48.2	41.5	38.9	97.2	87.1
Feb-20	55.7	48.2	41.4	38.8	97.0	87.0
Mar-20	55.6	48.1	41.3	38.7	96.9	86.8
Apr-20	55.5	48.0	41.2	38.6	96.8	86.7
May-20	55.5	48.0	41.2	38.6	96.6	86.5
Jun-20	55.4	47.9	41.1	38.5	96.5	86.4
Jul-20	55.3	47.8	41.0	38.4	96.3	86.2
Aug-20	55.3	47.8	40.9	38.3	96.2	86.1
Sep-20	55.2	47.7	40.8	38.2	96.1	86.0
Oct-20	55.2	47.7	40.8	38.2	95.9	85.8
Nov-20	55.1	47.6	40.7	38.1	95.8	85.7
Dec-20	55.0	47.5	40.6	38.0	95.6	85.5
Jan-21	55.0	47.5	40.5	37.9	95.5	85.4
Feb-21	54.9	47.4	40.4	37.9	95.4	85.3
Mar-21	54.9	47.4	40.4	37.8	95.2	85.1
Apr-21	54.8	47.3	40.3	37.7	95.1	85.0
May-21	54.7	47.2	40.2	37.6	95.0	84.9
Jun-21	54.7	47.2	40.1	37.6	94.8	84.7
Jul-21	54.6	47.1	40.1	37.5	94.7	84.6
Aug-21	54.5	47.0	40.0	37.4	94.5	84.4
Sep-21	54.5	47.0	39.9	37.3	94.4	84.3
Oct-21	54.4	46.9	39.8	37.3	94.3	84.2
Nov-21	54.4	46.9	39.8	37.2	94.1	84.0
Dec-21	54.3	46.8	39.7	37.1	94.0	83.9
Jan-22	54.2	46.7	39.6	37.0	93.9	83.8
Feb-22	54.2	46.7	39.6	37.0	93.7	83.6
Mar-22	54.1	46.6	0.0	0.0	54.1	46.6
Apr-22	54.1	46.6	19.7	17.1	73.8	63.7
May-22	54.0	46.5	39.3	36.7	93.3	83.2
Jun-22	53.9	46.4	39.3	36.7	93.2	83.1
Jul-22	53.9	46.4	39.2	36.6	93.1	83.0
Aug-22	53.8	46.3	39.1	36.5	92.9	82.9
Sep-22	53.8	46.3	39.0	36.5	92.8	82.7
Oct-22	53.7	46.2	39.0	36.4	92.7	82.6
Nov-22	53.6	46.1	38.9	36.3	92.5	82.5
Dec-22	53.6	46.1	38.8	36.2	92.4	82.3
Jan-23	53.5	46.0	38.8	36.2	92.3	82.2
Feb-23	53.5	46.0	38.7	36.1	92.2	82.1
Mar-23	53.4	45.9	38.6	36.0	92.0	81.9
Apr-23	53.4	45.9	38.6	36.0	91.9	81.8
May-23	53.3	45.8	38.5	35.9	91.8	81.7
Jun-23	53.2	45.7	38.4	35.8	91.7	81.6
Jul-23	53.2	45.7	38.4	35.8	91.5	81.4
Aug-23	53.1	45.6	38.3	35.7	91.4	81.3
Sep-23	53.1	45.6	38.2	35.6	91.3	81.2
Oct-23	53.0	45.5	38.1	35.6	91.1	81.1
Nov-23	52.9	45.4	38.1	35.5	91.0	80.9
Dec-23	52.9	45.4	38.0	35.4	90.9	80.8

* Average generation levels plants are capable of achieving.

**TABLE 7
2019 FORECAST OF GEOTHERMAL PRODUCTION AND
INJECTION**

TIME STEP	DATE	STEAM	COND	WATER
		PROD. BLBS	INJ BLBS	INJ BLBS
1	2019	14.1	4.5	15.0
2	2020	13.9	4.4	15.0
3	2021	13.7	4.4	14.9
4	2022	13.5	4.3	14.8
5	2023	13.2	4.2	14.7
6	2024	13.0	4.2	14.7
7	2025	12.8	4.1	14.6
8	2026	12.6	4.0	14.6
9	2027	12.5	4.0	14.5
10	2028	12.3	3.9	14.4
11	2029	12.1	3.9	14.4
12	2030	11.9	3.8	14.3
13	2031	11.8	3.8	14.3
14	2032	11.6	3.7	14.2
15	2033	11.4	3.7	14.2
16	2034	11.3	3.6	14.1
17	2035	11.1	3.6	14.1
18	2036	11.0	3.5	14.0
19	2037	10.9	3.5	14.0
20	2038	10.7	3.4	13.9
21	2039	10.6	3.4	13.9
22	2040	10.5	3.3	13.9
23	2041	10.3	3.3	13.8
24	2042	10.2	3.3	13.8
25	2043	10.1	3.2	13.7

NOTES :

- | | | |
|---|----------------|--|
| 1. CUM. PRODUCTION AND INJECTION 1983-2018 | 670.8
447.7 | Billion Lbs Steam
Billion Lbs Water |
| 2. TOTAL WATER IS CONDENSATE + EFFLUENT + LAKE + POND | | |
| 3. FUTURE STEAM PRODUCTION 2019-2043 = | 297.2 | Billion Lbs |
| 4. FUTURE WATER INJECTION 2019-2043 = | 357.8 | Billion Lbs |



Commission Staff Report

May 14, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: Approval of Revised Debt and Interest Rate Management Policy

AGENDA CATEGORY: Consent

FROM:	Monty Hanks <i>MH</i> Assistant General Manager/CFO	METHOD OF SELECTION: N/A
Division:	Administrative Services	<i>If other, please describe:</i>
Department:	Accounting & Finance	

IMPACTED MEMBERS:		
All Members <input checked="" type="checkbox"/>	City of Lodi <input type="checkbox"/>	City of Shasta Lake <input type="checkbox"/>
Alameda Municipal Power <input type="checkbox"/>	City of Lompoc <input type="checkbox"/>	City of Ukiah <input type="checkbox"/>
San Francisco Bay Area Rapid Transit <input type="checkbox"/>	City of Palo Alto <input type="checkbox"/>	Plumas-Sierra REC <input type="checkbox"/>
City of Biggs <input type="checkbox"/>	City of Redding <input type="checkbox"/>	Port of Oakland <input type="checkbox"/>
City of Gridley <input type="checkbox"/>	City of Roseville <input type="checkbox"/>	Truckee Donner PUD <input type="checkbox"/>
City of Healdsburg <input type="checkbox"/>	City of Santa Clara <input type="checkbox"/>	Other <input type="checkbox"/>
<i>If other, please specify</i>		

RECOMMENDATION:

The Finance Committee recommends adoption of Resolution 19-42, which approves the revised Debt and Interest Rate Management Policy, dated May 2019.

BACKGROUND:

NCPA has a debt portfolio that includes almost \$675 million in long-term debt, including \$85 million of outstanding interest rate swap exposure. The Commission has approved a Debt and Interest Rate Management Policy (Policy) to guide the Agency (staff, Commission, Finance Committee, legal counsel, financial advisors, and banking team) in the development, implementation and administration of the NCPA debt portfolio. The Policy includes guidance on interest rate swaps, variable rate debt exposure for the Agency and its members, credit risk mitigation with the banks and other debt related matters. The Finance Committee reviews and discusses possible changes to the Policy every two years, and has now finished the latest biennial review.

This report outlines the addition of a new Continuing Disclosure section (inserted as Section 24) to The Policy in accordance with Securities and Exchange Commission (SEC) Rule 15c2-12. That regulation requires that municipal debt issuers (issuers) enter into agreements to provide certain information to Municipal Securities Rulemaking Board (MSRB) about bonds on an ongoing basis. The regulation requires issuers to provide annual disclosure of financial information and operating data and audited annual financial statements on or before specified dates (as included in respective agreements). Rule 15c2-12 also requires that issuers file notice for 16 listed events within 10 business days of occurrence. This policy revision complies with the SEC February 27, 2019 update of Rule 15c2-12 and obtains responsibility for compliance. The policy revision also updated the Glossary to add two new definitions for the terms EMMA System and Financial Obligation.

The recommended new section of the policy (Section 24) is as follows:

1. Continuing Disclosure

Continuing disclosure consists of important information about a municipal bond that arises after the initial issuance of the bonds. This information generally reflects the financial health or operating condition of the state or local government as it changes over time, or the occurrence of specific events that can have an impact on key features of the bonds.

SEC Rule 15c2-12

Securities and Exchange Commission (SEC) Rule 15c2-12 requires that the state or local government issuing bonds enter into an agreement to provide certain information to the Municipal Securities Rulemaking Board (MSRB) about the securities on an ongoing basis. The Rule also requires that dealers, when underwriting certain types of municipal securities, ensure that the issuer has entered into such continuing disclosure agreements. New debt issues generally require the following continuing disclosure:

Annual Financial Information

- Financial information and operating data provided by state or local government or other obligated persons
- Audited financial statements for state or local government or other obligated persons, if available

Event Notices

- Principal and interest payment delinquencies
- Non-payment related defaults
- Unscheduled draws on debt service reserves reflecting financial difficulties
- Unscheduled draws on credit enhancements reflecting financial difficulties
- Substitution of credit or liquidity providers, or their failure to perform
- Adverse tax opinions or events affecting the tax-exempt status of the security
- Modifications to rights of security holders
- Bond calls and tender offers
- Defeasances
- Release, substitution or sale of property securing repayment of the securities
- Rating changes
- Bankruptcy, insolvency or receivership
- Merger, acquisition or sale of all issuer assets
- Appointment of successor trustee
- Financial obligation incurrence or agreement, if material*
- Default, event of acceleration, termination event, modification of terms or other similar events under the terms of a financial obligation of the obligated person, any of which reflect financial difficulties*

Timeframes for Submitting Disclosures

State or local governments or obligated persons must submit annual disclosures on or before the date specified in the continuing disclosure agreement or provide notice of failure to do so to the MSRB through the Electronic Municipal Market Access (EMMA®) website. Disclosure of events must be submitted to EMMA within 10 business days of the event. Administrative Services Staff reviews continuing disclosure requirements for each bond to determine appropriate due date(s) and maintains a checklist to ensure compliance with disclosure deadlines.

*Effective February 27, 2019

Exemptions from Rule 15c2-12

Continuing disclosure generally is not required for an issue if:

- The entire issue is for less than \$1 million
- The bonds are sold to investors in authorized denominations of \$100,000 or more to no more than 35 sophisticated investors
- The bonds are sold in authorized denominations of \$100,000 or more and mature in nine months or less from initial issuance
- The bonds were issued prior to July 1995 (or prior to December 1, 2010 for certain “puttable” securities.)

Compliance with continuing disclosure requirements

NCPA will ensure compliance with continuing disclosure requirements.

The following definitions have been added to the Glossary:

- **EMMA System:** the MSRB’s Electronic Municipal Market Access System or such other electronic system designated by the MSRB.
- **Financial Obligation:** (a) debt obligation; (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (c) guarantee of a debt obligation or any such derivative instrument; provided that “financial obligation” shall not include municipal securities as to which a final official statement (as defined in the Rule) has been provided to the MSRB.

A copy of the revised Policy is attached to the staff report.

FISCAL IMPACT:

Adoption of this revised Policy adds SEC Rule 15c2-12 continuing disclosure requirements. NCPA will not incur additional costs related to the revision.

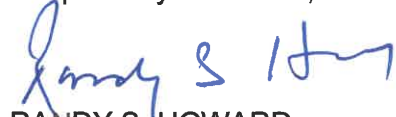
ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

The recommendation was reviewed by the Finance Committee on May 7, 2019 and was recommended for Commission approval.

Respectfully submitted,



RANDY S. HOWARD
General Manager

Attachments: Debt and Interest Rate Policy
Resolution 19-42

RESOLUTION 19-42

RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY APPROVING THE REVISED DEBT AND INTEREST RATE MANAGEMENT POLICY

(reference Staff Report #158:19)

WHEREAS, NCPA has a debt portfolio of almost \$675 million in long-term debt, including over \$85 million of outstanding interest rate swap exposure; and

WHEREAS, NCPA and its members benefit from the use of interest rate management tools, such as interest rate swaps as part of its overall debt management program; and

WHEREAS, prudent debt management practice supports the establishment of policies that establish parameters for the proper use of interest rate swaps and proper administration of the NCPA debt portfolio; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

WHEREAS, the NCPA Commission last reviewed and approved the “Debt and Interest Rate Management Policy” (Policy) in May 2017; and

WHEREAS, the Policy requires biennial review of the Policy to update for changes in bond markets, regulations and new financial products; and

WHEREAS, it is prudent and current best practice for municipal bond issuers to include continuing disclosure requirements in a Debt and Interest Rate Policy in accordance with Securities Exchange Commission Rule 15c2-12; and

WHEREAS, the Finance Committee has reviewed the proposed revisions to the Policy and recommends approval; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency adopts the Debt and Interest Rate Management Policy dated May 2019 as presented.

PASSED, ADOPTED and APPROVED this ____ day of _____, 2019 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

 ROGER FRITH
 CHAIR

ATTEST: _____
 CARY A. PADGETT
 ASSISTANT SECRETARY



Debt and Interest Rate Management Policy

May 2019

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1. Introduction

The purpose of this document (“the Policy”) is to set forth the policies that govern the Northern California Power Agency’s (“NCPA” or “the Agency”) implementation or use of any Fixed Rate Debt, Variable Rate Debt or interest rate Swaps and/or other interest rate Derivative-type transactions. NCPA’s debt and investment portfolio involves, and will continue to involve, different interest rate payments and interest rate risks. A variety of financial instruments are available to offset, hedge, or reduce those interest rate risks or provide a lower net cost of borrowing with respect to the Agency’s debt. The Policy governs the use of such hedging instruments and debt financing structures. It should be noted that the Policy limits and guidelines included in this document are based on financial circumstances as of the Policy’s most recent update and shall be subject to change as circumstances change, upon approval of the NCPA Finance Committee and the NCPA Commission (“Commission”). It should also be noted that the Policy is not intended to address commodity derivatives or other agreements, which the Agency might utilize as part of resource hedging for power supply management.

2. Use of Fixed Rate Debt

NCPA has historically utilized Fixed Rate Debt issuances to finance the majority of the capital requirements. As it relates to using Fixed Rate Debt structures, NCPA will follow guidelines consistent with the Government Finance Officers Association Best Practices for Governmental Debt Management. Additionally, NCPA will carefully consider the regulations, risks, and benefits of various kinds of Fixed Rate Debt such as traditional tax-exempt municipal bonds, taxable bonds, Build America Bonds, or other forms of Fixed Rate Debt. NCPA will also apply several guidelines specifically to the use of Fixed Rate Debt for refinancing existing debt obligations. Those include:

- For a Fixed Rate Debt refinancing of existing Fixed Rate Debt, NCPA will generally apply a minimum 5% Net Present Value Savings target for transactions which are expected to maintain the same level of risk related to the debt.
- For a Fixed Rate Debt refinancing of existing Synthetic Fixed Rate Debt, Variable Rate Debt or Synthetic Variable Rate Debt transactions which are believed and expected to reduce the risk related to the debt, NCPA will generally attempt to complete transactions that do not result in a Net Present Value Savings of less than 0%; however, the Policy does not preclude NCPA from executing a transaction that results in a Net Present Value Savings of less than 0% if the risk mitigation benefits are deemed to merit the cost.

As it relates to the risk and benefit tradeoffs of different Fixed Rate Debt structures, methods of sale, timing, detailed deal structure considerations and other factors, NCPA will rely on the expertise of the NCPA Finance Committee (“Finance Committee”), NCPA’s Financial Advisor and NCPA’s Bond Counsel. Moreover, notwithstanding the guidelines above, the Agency will not be precluded from issuing Fixed Rate Debt if so approved by the Commission.

3. Use of Variable Rate Debt

As it relates to using Variable Rate Debt structures, NCPA will follow guidelines consistent with the Government Finance Officers Association Best Practices for Governmental Debt Management. Additionally, NCPA shall use an overall asset/liability approach to management of its debt portfolio. As part of this management, NCPA shall attempt to manage its Unhedged Variable Rate Debt exposure to no more than the greater of 20% or \$100 million of the outstanding revenue bond obligations per project. For purposes of this limitation, Unhedged Variable Rate Debt exposure shall include both the principal amount of direct issue Variable Rate Debt and the notional amount of Synthetic Variable Rate Debt less:

- The amount of direct Variable Rate Debt for which variable interest rate exposure has been eliminated or reduced by interest rate Swaps or interest rate Caps, Collars or other hedging instruments.
- The amount of short-term assets held in reserves at NCPA, i.e., cash accounts, which provide a natural hedge against the Variable Rate Debt.

NCPA shall also attempt to manage its total Variable Rate Debt (both Hedged and Unhedged) exposure to no more than the greater of 50% or \$250 million of the outstanding revenue bond obligations per project.

NCPA may consider various structures for the issuance of Variable Rate Debt and, under appropriate market conditions as determined by the Finance Committee, Synthetic Variable Rate Debt. Decisions about which debt structure or Swap instrument to utilize at any point in time shall be based on a number of factors including the relative costs, benefits, and risks to NCPA and its members.

When applicable and possible, NCPA will attempt to stagger the renewal or remarketing risks associated with different kinds of Variable Rate Debt. NCPA will do so with the objective of limiting the risk that multiple series or significant dollar amounts of Variable Rate Debt might become subject to unanticipated redemption within a similar period of time.

4. Variable Rate Debt with Credit Enhancement

The use of Variable Rate Debt by NCPA has typically required use of credit facilities such as a direct pay Letters of Credit (“LOC”) primarily to ensure that the Variable Rate Debt has one of the two highest short-term ratings. Such short-term ratings are important to obtaining the lowest cost to NCPA and are necessary for the marketing of Variable Rate Demand Obligations (“VRDOs”) to money market and other short-term investors.

For the purposes of the Policy, Variable Rate Debt products, which require Credit Enhancement shall include VRDOs, which require either a Letter of Credit or Line of Credit (Standby Bond Purchase Agreement or “SBPA”) and not Direct Purchase Variable Rate Debt (Variable Rate Debt which does not have bank rating exposure but which still has similar credit terms as VRDOs with Credit Enhancement). Direct Purchase Variable Rate Debt will be tracked as Variable Rate Debt without Credit Enhancement, the guidelines for which are given in Section 5.

NCPA recognizes that concentration with a Credit Enhancement provider on Variable Rate Debt exposes NCPA to substantial risk. Given the risks associated with Credit Enhancement providers, NCPA should adhere to the following policies with regard to Variable Rate Debt structures, which require Credit Enhancement:

- The amount of bond insurance by any one bond insurer on NCPA’s VRDOs should not exceed the greater of 30% or \$150 million outstanding revenue bond obligations on any NCPA project;
- The amount of credit capacity provided by any one banking institution should not exceed the greater of 30% or \$150 million outstanding revenue bond obligations on any NCPA project;
- The ratings of any bond insurer for insured VRDOs must be no less than A1, A+ or equivalent by any two of the national recognized rating agencies (i.e., Moody’s Investors Service, Standard and Poor’s, or Fitch Ratings) at the time of procurement and implementation of the bond insurance; and
- The long-term credit ratings of any LOC or SBPA providers must be no less than A2, A or equivalent by any two of the national recognized rating agencies (i.e., Moody’s Investors Service, Standard and Poor’s, or Fitch Ratings) and the short-term credit ratings and must have no less than P1, A-1, or equivalent short-term ratings by any two of the national recognized rating agencies (i.e., Moody’s Investors Service, Standard and Poor’s, or Fitch Ratings) at the time of procurement and implementation of the LOC or SBPA. If credit ratings fall below the above levels at any time during the term of the credit enhancement, the financial situation of the banking institution and the downgrade impact on NCPA shall be monitored. In addition, consideration shall be given to the

possible replacement of the banking institution or other possible options for replacement products if the situation warrants such change.

NCPA will also attempt to limit the amount of Variable Rate Debt which requires Credit Enhancement to no more than the greater of 30% or \$150 million of the outstanding revenue bond obligations per project.

The Commission should approve any increases in exposure above the limits set above for Credit Enhancement providers.

5. Variable Rate Debt without Credit Enhancement

In recent years numerous structures have emerged to allow debt issuers to borrow funds without Credit Enhancement using bonds or notes which function as Variable Rate Debt the interest cost of which fluctuate from time to time. Such structures may be subject to remarketing and therefore not pegged to a particular index or may be indexed for a period of time to a published index such as LIBOR or SIFMA. Such structures are characterized by the lack of Credit Enhancement requirement but which have a different risk profile. "Direct Purchase" structures are to be considered under these guidelines instead of the guidelines applying to Variable Rate Debt with Credit Enhancement.

For the purposes of the Policy, NCPA will limit the issuance of Variable Rate Debt structures without Credit Enhancement to structures which have the following characteristics:

- The amount of Variable Rate Debt which is subject to a mandatory tender with the penalty of a failed mandatory tender being an immediate Event of Default will be limited to the greater of 10% or \$50 million outstanding revenue bond obligations on any NCPA project;
- The amount of Variable Rate Debt which is subject to a mandatory tender with the penalty of a failed mandatory tender being an Event of Default subsequent to a penalty rate period of 180 days or less will be limited to the greater of 20% or \$100 million outstanding revenue bond obligations on any NCPA project;
- In all cases, NCPA will favor Variable Rate Debt structures for which acceleration of principal repayment occurs over a period of not less than 3 years; and
- NCPA will attempt whenever possible to match the trading levels or index of the Variable Rate Debt with the appropriate receipt or payment leg of interest rate Swaps (if applicable).

NCPA will also attempt to limit the amount of Variable Rate Debt without Credit Enhancement to no more than the greater of 30% or \$150 million of the outstanding revenue bond obligations per project.

6. Consideration of Financial Proposals

In order to facilitate NCPA's receipt of financing proposals associated with existing or contemplated debt, NCPA shall retain internal expertise and utilize an Independent Registered Municipal Advisor ("IRMA") as necessary, to provide advice to NCPA on proposals from broker-dealers or banks. NCPA's IRMA will be required to be registered as a Municipal Advisor with the Securities and Exchange Commission ("SEC") and the Municipal Securities Rulemaking Board ("MSRB").

7. Use of Interest Rate Swaps

NCPA will determine if interest rate Swaps are appropriate in accordance with the provisions of Section 5922(a) of the Government Code and the Agency may execute interest rate Swaps only if the transaction can be reasonably expected to achieve one or more of the following objectives:

- Result in a lower net cost of borrowing with respect to the Agency's debt, or achieve a higher net rate of return on the investment of Agency moneys;
- Reduce exposure to changes in interest rates either in connection with a particular debt financing or investment transaction or in the management of interest rate risk with respect to the Agency's overall debt and investment portfolios;

- Manage variable interest rate exposure consistent with prudent practices and guidelines approved by the Commission; or
- Manage other financial risks or counterparty exposures in a manner consistent with prudent practices and guidelines approved by the Commission.

NCPA may utilize the following interest rate Swaps, on a either current or forward basis, after identifying the objectives to be realized and assessing the attendant risks:

- Interest rate Swaps, including fixed, floating and/or basis Swaps;
- Interest rate caps, floors and collars; or
- Options, including on Swaps, caps, floors and/or collars and/or cancellation or index-based features.

NCPA shall not execute interest rate Swaps under the following circumstances:

- When a financial instrument is used for speculative purposes rather than for managing and controlling interest rate risk in connection with Agency debt or investments;
- When the financial instrument creates extraordinary leverage or financial risk; or
- When there is insufficient price “transparency” to permit the Agency and its advisors to reasonably value the instrument, as a result, for example of the use of unusual structures or terms.

In addition, review of any proposed interest rate Swap shall consider the following:

- Identify the proposed benefit and potential risks as outlined in the Policy;
- Prepare an independent analysis of potential savings from a proposed transaction, on a Project and per participant basis;
- Prepare an analysis of the Fixed Rate Debt versus Variable Rate Debt and Swap exposure on a Project and per participant basis before and after the proposed transaction;
- Prepare a cash flow sensitivity analysis using parameters recommended by Standard & Poor’s of 7.0% of LIBOR and BMA/LIBOR ratio at 75% to determine worst case impacts of LIBOR based Swaps; and
- Consider views of rating agencies based on published reports or criteria used by rating agencies.

8. Interest Rate Swaps – Term and Notional Amounts

NCPA shall determinate the appropriate term for an interest rate Swap agreement on a case-by-case basis. Any Swap shall not extend beyond the greater of: the final maturity date of existing debt of NCPA, or in the case of a refunding transaction, beyond the final maturity date of the refunding bonds or the termination of the related Third Phase Agreement for the relevant NCPA project. No new interest rate Swap transaction shall be approved that causes the notional amount of all interest rate Swaps to exceed 50% or \$250 million of the total amount of outstanding revenue bonds, or liquid assets on a project basis—except to the extent that an interest rate Swap is intended as a modification to another interest rate Swap (i.e., a basis Swap executed to modify the terms of an existing fixed payer Swap may not be counted as an interest rate Swap on its own so long as the fixed payer Swap which it modifies remains in place).

9. Interest Rate Swaps – Counterparty Ratings

NCPA shall be authorized to enter into interest rate Swap transactions only with Qualified Swap Counterparties (or their guarantors) which must have no less than A1, A+, or equivalent long-term ratings by any two of the national recognized rating agencies (i.e., Moody’s Investors Services, Standard and Poor’s, or Fitch Ratings) at the time that the interest rate Swap is executed. In addition, the counterparty must have a demonstrated record of successfully executing Swap transactions. Each counterparty shall have a minimum capitalization of at least \$250 million.

10. Interest Rate Swaps – Counterparty Exposure Limits

In order to diversify the Agency’s counterparty credit risk and to limit the Agency’s credit exposure to any one counterparty, the following limits are established on termination exposure for any one counterparty. These limits shall only apply at the time a Swap and/or related transaction is entered into, and thus may be exceeded during the term of a Swap or Swaps with the same counterparty. Upon approval by the Commission, exceptions may be made to these limits to the extent that the execution of a Swap achieves one or more of the objectives outlined herein.

For the purposes of these limits, “Maximum Net Termination Exposure” shall mean an amount equal to the aggregate maximum reasonably anticipated net termination payment exposure for all of the Agency’s existing and proposed Swap agreements with such counterparty as determined by the Agency’s financial advisor, bond counsel, in-house counsel and finance staff (“Finance Team”). At any given time, maximum reasonably anticipated net termination payment exposure shall be calculated based on market conditions and at assumed market conditions representing a change in taxable rates both up and down by 200 basis points. Prior to entering a new Swap with a counterparty, the maximum reasonable anticipated net termination payment exposure should be less than the Maximum Net Termination Exposures listed below or as changed from time to time by the Finance Committee due to changing financial circumstances.

The established limits vary based upon the credit rating of the counterparty. If the counterparty has more than one rating, the lowest rating will govern for purposes of calculating the permissible levels of exposure. The limits are as follows:

Counterparty Credit Exposure Limits			
Credit Rating	Maximum Collateralized Exposure	Maximum Uncollateralized Exposure	Maximum Total Termination Exposure
AA Category	\$50 million	\$25 million	\$50 million
A Category	\$25 million	\$10 million	\$25 million
Below A	\$10 million	\$0	\$10 million

In addition, the sum total notional amount per Swap counterparty may not exceed 35% of NCPA’s total revenue bond indebtedness on a project basis.

Individual Swap contract limits will determine collateral and terminations provisions. When possible, these documents shall be drafted to so as not to conflict with NCPA’s policies.

If any exposure limit is exceeded by a counterparty during the term of a Swap agreement, the General Manager shall consult with the Agency’s Finance Team regarding appropriate strategies, if any, to mitigate this exposure.

11. Interest Rate Swaps – Maximum Termination Exposure

As of the date of execution of any Swap agreement and/or related instrument, the aggregate maximum reasonably anticipated net termination payment exposure for all of the Agency’s existing and proposed Swap agreements, as determined by the Agency’s Finance Team, shall not exceed \$75,000,000 or amounts as determined from time to time by the Finance Committee based on currently available financial data for the Agency.

12. Interest Rate Swaps – Collateral Requirements

As part of any Swap agreement, NCPA may require collateralization or other Credit Enhancement to secure any or all Swap payment obligations of the counterparty. As appropriate, the General Manager may require collateral or other Credit Enhancement to be posted by each Swap counterparty under the following circumstances:

- Each counterparty may be required to post collateral if the credit rating of the counterparty or its guarantor falls below the A2, A or equivalent by any two of the national recognized rating agencies (i.e., Moody's Investors Service, Standard and Poor's or Fitch Ratings). The amount of collateral posted shall be equal to the positive termination value of the Swap agreement to the Agency from time to time.
- Collateral shall consist of cash, U.S. Treasury securities and U.S. Agency securities.
- Collateral shall be deposited with a custodian, acting as agent for the Agency, or as mutually agreed upon between the Agency and each counterparty.
- A list of acceptable securities that may be posted as collateral and the valuation of such collateral will be determined and mutually agreed upon during negotiation of the Swap agreement with each Swap counterparty.
- The market value of the collateral shall be determined on at least a monthly basis.
- The General Manager will determine reasonable threshold limits for the initial deposit and for increments of collateral posted thereafter.
- The General Manager shall determine on a case-by-case basis whether other forms of Credit Enhancement are more beneficial to the Agency.

In connection with any collateralization requirements that may be imposed upon the Agency in connection with a Swap agreement, the Agency may post collateral or it may seek to obtain Swap insurance in lieu of posting collateral. The General Manager shall recommend a preferred approach to the Agency on a case-by-case basis.

13. Interest Rate Swaps – Termination Provisions

All interest rate Swap transactions shall contain provisions granting the Agency the right to optionally terminate a Swap agreement at any time over the term of the agreement.

A termination payment to or from the Agency may be required in the event of termination of a Swap agreement due to a default by or a decrease in the credit rating of either NCPA or the counterparty. Prior to entering into the Swap agreement or making any such termination payment, as appropriate, the General Manager shall evaluate whether it would be financially advantageous for the Agency to enter into a replacement Swap as a means of offsetting any such termination payment. Any such Swap would be subject to Commission and other approvals as set forth herein.

Any Swap termination payment due from the Agency shall be made from legally available Agency monies and shall be billed to each participant in accordance with member contracts. Any such termination payments shall be reported to the Commission at the next Commission meeting.

NCPA shall consider the extent of its exposure to termination payment liability in connection with each Swap transaction, and the availability of sufficient liquidity to make any such payments that may become due.

14. Form of Interest Rate Swap Agreements

Each interest rate Swap executed by the Agency shall contain terms and conditions as set forth in the International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement, including the Schedule to the Master Agreement and a Credit Support Annex, as supplemented and amended in accordance with the recommendations of the Agency's Finance Team. Each Swap agreement between the Agency and each Qualified Swap Counterparty (as detailed below) shall include payment, term security, collateral, default, remedy, termination, and other terms, conditions and provisions as the Finance Team deem necessary or desirable.

Subject to the provisions contained herein, the terms of any NCPA interest rate Swap shall use the following guidelines:

- Downgrade provision triggering termination shall in no event be worse than those affecting the counterparty;
- Preferred governing law for Swaps shall be in California; and
- Termination value should be set by a “market quotation” methodology, unless NCPA deems an alternate method appropriate.

15. Compliance with Regulatory Requirements for Interest Rate Swap Transactions

NCPA qualifies as a “Special Entity” as defined in Section 1a (50) of the Commodity Exchange Act and Commodity Futures Trading Commission (“CFTC”) Regulation 23.401(c). As such, NCPA will not be a “Reporting Counterparty” which would be subject to certain obligations. NCPA, however, will comply with Schedule IV, Part 1 of the ISDA Protocol in order to be covered under the Safe Harbor in Dodd-Frank. Schedule IV, Part 1 requires that NCPA meet several requirements:

- NCPA will not rely on Swap recommendations (if any) provided by Swap Dealers;
- NCPA will rely on advice from a Designated QIR as defined in Dodd-Frank;
- NCPA will comply with written policies and procedures reasonably designed to ensure that the Designated QIR selected by NCPA satisfies the applicable requirements of CFTC Regulation 23.405(b)(1) and that such policies and procedures provide for ongoing monitoring of the performance of such representative consistent with the requirements of CFTC Regulation 23.450(b)(1); and
- NCPA will exercise independent judgment in consultation with a Designated QIR, in evaluating all Swap recommendations (if any) of Swap dealers that are presented to NCPA with respect to Swaps to be executed by NCPA on its own behalf.

NCPA will comply with all regulatory requirements, as applicable to NCPA, associated with the execution of new interest rate swaps or the maintenance of existing interest rate swaps.

16. Authority for Fixed Rate Debt, Variable Rate Debt and Swap Agreements

The Commission may adopt resolutions from time to time authorizing the issuance of Fixed Rate Debt, Variable Rate Debt or execution of interest rate Swaps, which will be executed by NCPA’s General Manager.

Prior to seeking Commission approval of a proposed Fixed Rate Debt, Variable Rate Debt, or interest rate Swap transaction, NCPA will invite to a Finance Committee meeting, all participants in the Project subject to the proposed transaction to express their views as to whether to recommend the proposed transaction to the Commission for its consideration. Any objection by a participant shall be considered.

The General Manager must obtain the approval of the Finance Committee and the Commission prior to the issuance of Fixed Rate Debt or Variable Rate Debt or execution of any interest rate Swap transaction. The General Manager, with the concurrence of outside Bond Counsel, shall determine whether a proposed debt transaction or interest rate Swap agreement is legally valid and complies with any applicable provisions of the Agency’s legal agreements.

NCPA recognizes that changes in the capital markets, Agency programs, financial circumstances and other unforeseen circumstances may from time to time produce situations that are not covered by this policy and will require modifications or exceptions to achieve policy goals. In these cases management flexibility is appropriate, provided specific authorization from the Finance Committee and the Commission is obtained prior to execution of a transaction.

17. Identification and Evaluation of Financial and Other Risks

Prior to obtaining Commission approval of the issuance of Fixed Rate Debt or Variable Rate Debt or execution of interest rate Swaps, the Finance Committee shall identify and evaluate the financial risks associated with the proposed transaction, and summarize them clearly and concisely for the Commission, along with any measures that will be taken to mitigate those risks. The following types of risks shall be evaluated in connection with each proposed transaction:

- **Market or Interest Rate Risk:** Does the proposed transaction hedge or create exposure to fluctuations in interest rates? If so, what factors might affect such rates?
- **Tax Law Risk:** Is the proposed transaction subject to rate adjustments, extraordinary payments, termination or other adverse consequences in the event of a future change in Federal Income Tax Policy? Is the proposed transaction subject to receipt of funds from the federal government?
- **Termination Risk:** Under what circumstances might the proposed transaction be terminated? At what cost? Does the Agency have sufficient liquidity to cover this exposure? Does the financing structure have elements to deal with unanticipated termination?
- **Risk of Uncommitted Funding (Put Risk):** Does the transaction require or anticipate a future financing action? Is that action dependent upon third party participation? What commitments can be or have been secured for such participation? What policies or procedures does the Agency have in place to deal with this risk?
- **Legal Authority:** Is there any uncertainty regarding the legal authority of any party to participate in the transaction?
- **Counterparty Credit Risk:** What is the creditworthiness of the counterparty? What provisions have been made to mitigate exposure to adverse changes in their credit standing?
- **Ratings Risk:** What exposure does the Agency have to ratings of third parties? What effect would a change in an Agency project debt rating have on the transaction? Will the execution of the transaction have a negative impact on any one participant's credit rating?
- **Basis Risk:** Does the anticipated payments that the Agency would make or receive under the interest rate Swap match the payments or receipts that it seeks to hedge?
- **Tax Status of Agency Debt:** Does the transaction comply with all tax law requirements with respect to the Agency's outstanding bonds?
- **Accounting Risk:** Does the proposed transaction create any accounting issues that could have a detrimental effect on the Agency's financial statements? Would the proposed transaction have any effect on compliance with bond covenants? How are any such effects addressed or mitigated?
- **Administrative Risk:** Can the proposed transaction be readily administered and monitored by the Agency's finance staff or team consistent with the requirements outlined in this policy?
- **Subsequent Business Conditions:** Does the proposed transaction or its benefits depend upon the continuation or realization of specific industry or business conditions?
- **Credit Enhancement Provider Risk:** Does the financial strength and credit ratings of the Credit Enhancement provider (if any) affect the business terms of the Fixed Rate Debt, Variable Rate Debt or interest rate Swap? Does a credit downgrade trigger events that affect the economics of the Fixed Rate Debt, Variable Rate Debt or interest rate Swap?
- **Credit Risk:** Is it expected that credit support, if needed, will be available and exist at a reasonable cost over the term of any Fixed Rate Debt, Variable Rate Debt or interest rate Swap?
- **Amortization Risk:** Is the Fixed Rate Debt or Variable Rate Debt amortization appropriate for the life of the project, assets and Third Phase Agreements to which it is related? Does the amortization of the underlying debt or assets, match a proposed interest rate Swap agreement?

18. Anticipated Value Thresholds and Criteria

Any proposed Variable Rate Debt or Swap transactions under the Policy not having tax risk should be anticipated to generate at least 7% Net Present Value Savings or at least 2% incremental benefit above a traditional Fixed Rate Debt refunding transaction when compared to the notional amount of the Swap. Any proposed transactions under this policy having tax risk (i.e., a LIBOR Swap) should be anticipated to generate at least 10% Net Present Value Savings or at least 5% incremental benefit above a traditional Fixed Rate Debt refunding transaction when compared to the notional amount of the Swap, as determined by the General Manager. All transaction related fees should be included in the calculation to determine the net present value benefit of the transaction. NCPA should also consider the potential for fees to increase from assumed levels. Also, the renewal risk associated with credit facilities should be incorporated in the analysis. This threshold shall be a guideline and is subject to override by the Commission, should the transaction, in the Commission's sole judgment, help to meet any of the other objectives outlined herein.

Notwithstanding the net present value thresholds described, the Finance Team may consider and the Commission may authorize Swap or Variable Rate Debt transactions which, in the determination of the Finance Team are risk neutral to the Agency's financial obligations or which result in risk reduction and not net present value benefit.

19. Procurement Process Requirements

NCPA may either negotiate or competitively bid its Fixed Rate Debt, Variable Rate Debt or interest rate Swap transactions.

20. Monitoring and Reporting Requirements

The Finance Team will monitor any Fixed Rate Debt, Variable Rate Debt and interest rate Swaps that the Agency has outstanding on at least a monthly basis. The Finance Team will provide a written report the Commission regarding the status of all Variable Rate Debt and interest rate Swaps at least on a semi-annual basis to the Finance Committee and to the Commission. Such reports shall include the following information:

- Highlights of all material changes to Fixed Rate Debt, Variable Rate Debt and interest rate Swaps entered into by the Agency since the last report;
- Highlight any changes to Fixed Rate Debt, including any subsidy considerations, material bond proceeds fund investment issues, continuing obligation considerations, escrow considerations, rating triggers, or other developments which might affect the expected continuity and performance of the Fixed Rate Debt;
- The performance of Variable Rate Debt compared to relevant indices since the last report;
- Tracking of future put dates, remarketings, Credit Enhancement renewals, and other pending dates of importance for the continuation of Variable Rate Debt structures;
- Changes to any fees paid to any third parties including Credit Enhancement providers, remarketing agents, etc.;
- Market value of each of the Agency's interest rate Swaps;
- The net impact to the Agency of a 50 basis point movement (up and down) in the appropriate taxable Swap market curves, and a tax/market adjusted movement in tax-exempt market Swap curves;
- For each counterparty, the Agency shall provide the total notional amount position, the average life of each interest rate Swap agreement, and the remaining term of each interest rate Swap agreement;
- Separately for each Variable Rate Debt structure or interest rate Swap, the actual cumulative cost or benefit versus the projected cost or benefit of the transaction;

- The credit ratings and outlooks (making particular note of any rating changes) for each interest rate Swap counterparty and credit enhancer associated with a Variable Rate Debt structure or interest rate Swap;
- The credit ratings and outlooks (if applicable) for any Variable Rate Debt with Credit Enhancement or any Variable Rate Debt without Credit Enhancement;
- Actual collateral posting by each interest rate Swap counterparty;
- A summary of each interest rate Swap, including, but not limited to, the type of interest rate Swap, the rates and dollar amounts paid by the Agency and received by the Agency, and other terms;
- Information concerning any default by an interest rate Swap counterparty under an agreement with the Agency, and the results of the default, including but not limited to the financial impact to the Agency and its members, if any;
- A summary of any planned Fixed Rate Debt, Variable Rate Debt and interest rate Swaps and the projected impact of such Variable Rate Debt and interest rate Swaps on the Agency and its members; and
- A summary of any Fixed Rate Debt, Variable Rate Debt and interest rate Swaps that were refinanced or terminated.

21. Accounting and Budget Treatment

NCPA shall comply with any applicable accounting standards for the treatment of Fixed Rate Debt, Variable Rate Debt, interest rate Swaps and related financial instruments. On an annual basis the budget treatment for debt and Swaps shall be reviewed and recommendations made as to the treatment for each annual operating budget, as determined by the project participants.

22. Commission Authorization to Control

Nothing in this Policy shall affect the validity or enforceability of any agreement by the Agency pursuant to authorization by the Commission.

23. Compliance with Senate Bill No. 1029

SEC. 2. (i)

NCPA, no later than 30 days prior to the sale of any debt issue, submits a report of the proposed issuance to the California Debt and Investment Advisory Commission (“CDIAC” or the “commission”) by any method approved by the commission. Under Senate Bill 1029 (SB 1029 or the bill), NCPA will include a certification to CDIAC that NCPA has adopted a local debt policy concerning the use of debt and that the contemplated debt issuance is consistent with the local debt policy. NCPA’s adopted Debt and Interest Rate Management Policy addresses all of the following requirements:

- The purposes for which the debt proceeds may be used.
 - NCPA’s adopted Debt and Interest Rate Management Policy addresses this as can be seen in language contained in “2. Use of Fixed Rate Debt.”
- The types of debt that may be issued.
 - NCPA’s adopted Debt and Interest Rate Management Policy addresses this as can be seen in language contained in “2. Use of Fixed Rate Debt” and “3. Use of Variable Rate Debt.”
- The relationship of the debt to, and integration with, the issuer’s capital improvement program or budget, if applicable.
 - NCPA’s adopted Debt and Interest Rate Management Policy addresses this as can be seen in language contained in “2. Use of Fixed Rate Debt,” “16. Authority for Fixed Rate

Debt, Variable Rate Debt and Swap Agreements” and “21. Accounting and Budget Treatment.”

- Policy goals related to the issuer’s planning goals and objectives.
 - NCPA’s adopted Debt and Interest Rate Management Policy addresses this as can be seen in language contained in “2. Use of Fixed Rate Debt,” “3. Use of Variable Rate Debt” and “16. Authority for Fixed Rate Debt, Variable Rate Debt and Swap Agreements.”
- The internal control procedures that the issuer has implemented, or will implement, to ensure that the proceeds of the proposed debt issuance will be directed to the intended use.
 - NCPA’s adopted Debt and Interest Rate Management Policy addresses this as can be seen in language contained in “16. Authority for Fixed Rate Debt, Variable Rate Debt and Swap Agreements,” “20. Monitoring and Reporting Requirements” and “21. Accounting and Budget Treatment.”

SEC. 2. (j)

NCPA will not later than 21 days after the sale of the debt, submit a report of final sale to the commission by any method approved by the commission.

SEC. 2. (k)

NCPA will submit an annual report for any issue of debt for which it has submitted a report of final sale pursuant to subdivision (j) on or after January 21, 2017. The annual report shall cover a reporting period from July 1 to June 30, inclusive, and shall be submitted no later than seven months after the end of the reporting period by any method approved by the commission. The annual report shall consist of the following information:

- Debt authorized during the reporting period
 - Debt authorization as of July 1
 - New debt authorized and issued during the reporting period
 - New debt authorized but not issued as of June 30 of the following year
 - Debt authority that has lapsed during the reporting period
- Debt outstanding during the reporting period
 - Principal balance as of July 1
 - Principal paid during the reporting period
 - Principal balance as of June 30 of the following year
- Use of proceeds for debt issued during the reporting period
 - Debt proceeds available at July 1
 - Debt proceeds spent, including the purpose, during the reporting period
 - Debt proceeds remaining as of June 30 of the following year

24. Continuing Disclosure

Continuing disclosure consists of important information about a municipal bond that arises after the initial issuance of the bonds. This information generally reflects the financial health or operating condition of the state or local government as it changes over time, or the occurrence of specific events that can have an impact on key features of the bonds.

SEC Rule 15c2-12

Securities and Exchange Commission (SEC) Rule 15c2-12 requires that the state or local government issuing bonds enter into an agreement to provide certain information to the Municipal Securities Rulemaking Board (MSRB) about the securities on an ongoing basis. The Rule also requires that dealers, when underwriting certain types of municipal securities, ensure that the issuer has entered into such continuing disclosure agreements. New debt issues generally require the following continuing disclosure:

Annual Financial Information

- Financial information and operating data provided by state or local government or other obligated persons
- Audited financial statements for state or local government or other obligated persons, if available

Event Notices

- Principal and interest payment delinquencies
- Non-payment related defaults
- Unscheduled draws on debt service reserves reflecting financial difficulties
- Unscheduled draws on credit enhancements reflecting financial difficulties
- Substitution of credit or liquidity providers, or their failure to perform
- Adverse tax opinions or events affecting the tax-exempt status of the security
- Modifications to rights of security holders
- Bond calls and tender offers
- Defeasances
- Release, substitution or sale of property securing repayment of the securities
- Rating changes
- Bankruptcy, insolvency or receivership
- Merger, acquisition or sale of all issuer assets
- Appointment of successor trustee
- Financial obligation incurrence or agreement, if material*
- Default, event of acceleration, termination event, modification of terms or other similar events under the terms of a financial obligation of the obligated person, any of which reflect financial difficulties*

Timeframes for Submitting Disclosures

State or local governments or obligated persons must submit annual disclosures on or before the date specified in the continuing disclosure agreement or provide notice of failure to do so to the MSRB through the Electronic Municipal Market Access (EMMA®) website. Disclosure of events must be submitted to EMMA within 10 business days of the event. Administrative Services Staff reviews continuing disclosure requirements for each bond to determine appropriate due date(s) and maintains a checklist to ensure compliance with disclosure deadlines.

*Effective February 27, 2019

Exemptions from Rule 15c2-12

Continuing disclosure generally is not required for an issue if:

- The entire issue is for less than \$1 million
- The bonds are sold to investors in authorized denominations of \$100,000 or more to no more than 35 sophisticated investors
- The bonds are sold in authorized denominations of \$100,000 or more and mature in nine months or less from initial issuance
- The bonds were issued prior to July 1995 (or prior to December 1, 2010 for certain “puttable” securities.)

Compliance with continuing disclosure requirements

NCPA will ensure compliance with continuing disclosure requirements.

25. Biennial Review of Policy

The Finance Committee shall review the Agency’s Debt and Interest Rate Management Policy on a biennial basis and recommend appropriate changes to the Commission.

26. Glossary

- **Asset/Liability Matching:** Matching the term and amount of assets and liabilities in order to mitigate the impact of changes in interest rates.
- **Call Option:** The right to buy an underlying asset after a certain date and at a certain price. A call option is frequently embedded in a municipal; bond, giving the issuer the right to buy, or redeem, the bonds at a certain price.
- **Cap:** A ceiling on the interest rate paid.
- **Collar:** The combination of owning a Cap and selling a Floor. General structured so the net cost of a collar is close to zero, i.e., the expense for the Cap premium is offset by the credit received for the floor premium.
- **Collateral:** Assets pledged to secure an obligation. The assets are potentially subject to seizure in the event of a default.
- **Credit Enhancement:** Any one of the variety of third party offerings, including bond insurance, Letters-of-Credit, Standby Bond Purchase Agreement and other comparable products, which provide of rating enhancing security or additional liquidity.
- **Derivative:** A financial product that is based upon another product. Generally derivatives are risk mitigation tools.
- **Downgrade:** A negative change in credit ratings.
- **EMMA System:** the MSRB’s Electronic Municipal Market Access System or such other electronic system designated by the MSRB.
- **Financial Obligation:** (a) debt obligation; (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (c) guarantee of a debt obligation or any such derivative instrument; provided that “financial obligation” shall not include municipal securities as to which a final official statement (as defined in the Rule) has been provided to the MSRB.
- **Floor:** A lower limit on the interest rate that may be paid.
- **Forward Starting Swap:** Interest rate Swaps that start at some time in the future.
- **Hedge:** A transaction that reduces the interest rate risk of an underlying security.

- **Interest rate Swap:** The exchange of a fixed interest rate and a floating interest rate between counterparties.
- **Hedged:** Debt obligations which are associated with an interest rate Swap intended to reduce the volatility of the cost and risk of other obligations.
- **ISDA:** The International Swaps and Derivatives Association, a global trade association representing participants in the derivatives industry.
- **Liquidity Support:** An agreement by a bank to make payment on a variable rate security to assure investors that the security can be sold.
- **Letter of Credit:** An agreement by a bank to provide both long-term and irrevocable short-term Credit Enhancement.
- **LIBOR:** The London Interbank Offer Rate. Used as an index to compute the variable rates for certain interest rate Swaps.
- **Notional Amount:** The agreed upon principal amount used to determine the interest payments in a Swap transaction.
- **Net Present Value Savings:** The savings derived from a refinancing by discounting the net cashflow savings of the refunding transaction when compared to the refunded transaction inclusive of estimates of all costs, fund earnings, etc., at the yield estimated for tax purposes, to the estimated date of issuance of the refunding bonds, divided by the par amount of the refunded bonds.
- **Option:** There are two primary types of options, put and call. An option is considered a wasting asset because it has a stipulated life and may expire worthless.
- **Put Option:** A contract that grants the purchaser the right, but not the obligation to exercise.
- **SIFMA Index:** The Securities Industry and Financial Markets Association Municipal Swap Index, the principal benchmark for floating rate payments of tax-exempt issuers. The SIFMA Index is a national composite of approximately 200, high-grade seven day tax-exempt variable rate issues of \$10 million or more.
- **Swap:** An immediate or forward starting contractual agreement between two parties to exchange future net cash flows based on predetermined indices calculated on an agreed notional amount. May include a "Swaption" or a Swap option, which is an agreement that provides one party with the right to begin, terminate or extend a Swap, based on certain agreed upon parameters.
- **Swaption:** An option on an interest rate Swap that gives the purchaser the right, but not the obligation to enter into an interest rate Swap.
- **Synthetic Fixed Rate:** Variable rate debt, which by virtue of an associated Swap hedge, which has a variable rate receipt leg and a fixed payment leg, which approximates the variable rates on the debt, has an expected fixed cost profile which (together with the associated Swap) approximates that of Fixed Rate Debt.
- **Synthetic Variable Rate:** Fixed rate debt which by virtue of an associated Swap hedge which has a fixed rate receipt leg and a variable payment leg which approximates the rates on the debt, has an expected variable cost profile which (together with the associated Swap) approximates that of Variable Rate Debt.
- **Termination Payment:** A payment made by a counterparty that is required to terminate the Swap agreement. The payment is commonly based on the market value of the Swap, which is computed using the rate on the initial Swap and the rate of a replacement Swap.
- **Unhedged:** Debt obligations, which are not associated with an interest rate Swap intended to reduce the volatility of the cost of those obligations.
- **Yield Curve:** The graphic or tabular representation of interest rates across different maturities (i.e., short-term to long-term).



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Commission Staff Report

May 14, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: Approval of Fiscal Year 2020 Annual Budget

AGENDA CATEGORY: Discussion/Action

FROM:	Monty Hanks <i>MH</i> Assistant General Manager/CFO	METHOD OF SELECTION: N/A
Division:	Administrative Services	
Department:	Accounting & Finance	

IMPACTED MEMBERS:		
All Members <input checked="" type="checkbox"/>	City of Lodi <input type="checkbox"/>	City of Shasta Lake <input type="checkbox"/>
Alameda Municipal Power <input type="checkbox"/>	City of Lompoc <input type="checkbox"/>	City of Ukiah <input type="checkbox"/>
San Francisco Bay Area Rapid Transit <input type="checkbox"/>	City of Palo Alto <input type="checkbox"/>	Plumas-Sierra REC <input type="checkbox"/>
City of Biggs <input type="checkbox"/>	City of Redding <input type="checkbox"/>	Port of Oakland <input type="checkbox"/>
City of Gridley <input type="checkbox"/>	City of Roseville <input type="checkbox"/>	Truckee Donner PUD <input type="checkbox"/>
City of Healdsburg <input type="checkbox"/>	City of Santa Clara <input type="checkbox"/>	Other <input type="checkbox"/>
<i>If other, please specify</i>		

RECOMMENDATION:

The NCPA Commission adopt and approve the FY2020 Annual Budget and Working Capital and Funding Requirement as outlined in Resolution 19-43 and as detailed in the attached budgetary support and Annual Budget document.

BACKGROUND:

In October 2018, the Commission approved budget guidance for the NCPA FY2020 Annual Budget. Staff began preparation of the proposed budget during the following months. From February through April 2019, staff presented the budget to various Commission Committees as follows:

- Facilities Committee (March 12th, April 3rd)
- Legislative and Regulatory Committee (February 20th)
- Utility Directors (March 14th Retreat, April 11th)
- Budget Preview (Commission meeting April 25th)
- Lodi Energy Center Project Participants Committee (March 11th, April 8th)

Presentations made to the Commission and Committees during review of the proposed FY2020 Annual Budget are located on the NCPA website at: www.ncpa.com under the Meetings heading, Committees subheading on the dates indicated. The entire budget document is available on the Agency's extranet site, [NCPA Connect](#).

All changes resulting from the budget review meetings have been incorporated into the proposed FY2020 Annual Budget.

Overview of the FY2020 Annual Budget

This proposed budget totals \$406.7 million (net of revenues). Overall results are 10.56% or \$38.8 million dollar increase over the FY2019 approved budget. Budget changes include:

Generation Plants

- Increases in Plants' Energy Sales (\$27.1m) due to higher expected generation
- Increases in Fuel and Pipeline Transport Credits (\$0.7m) due to higher prices
- Decreased net debt service (\$1.8m) due to refunding of Hydro debt
- Increased fuel costs for LEC and gas projects (\$7.0m)
- Higher LEC variable costs (\$0.6m) for its Siemens service contract due to increased generation
- Higher O&M projects, Capital projects and Maintenance reserve costs (\$2.1m) for overhauls and new equipment
- Increased Capital Development Reserve funding (\$3.3m) for major Hydro projects

Generation Resources

- Increased Load Aggregation costs (\$46.3m)
- Net reduction from Member Energy and Natural Gas contracts, NCPA Contracts, and Western Resources (\$4.7m)
- Decreased GHG obligations (\$0.6m) due to allowance balances

Transmission

- Increased costs (\$4.3m) due to increases in gross load and transmission access charges

Management Services

- Net decrease in expenses (\$0.2m) due to reductions in non-personnel related costs, outside services and one-time capital projects despite an increase in Salaries & Benefits.

Personnel

- Net increase of 1.0 FTE (CT1 Specialist) and two part-time interns (Legal and IS)

Miscellaneous

- Increase in APPA dues of \$12k
- Increase in meter maintenance costs of \$22k
- Decrease in SOT of \$84k
- Decrease in Member Services projects of \$8k

Working Capital Deposit and Funding Requirement

The Agency provides Working Capital for its Participants and Programs through a combination of:

- Month Ahead Advance Billing;
- Project Financed Deposits; and
- Working Capital Participant Deposits of 15 to 30 days' equivalencies – see attached Analysis of Working Capital Requirements.

In connection with the preparation of the Annual Budget, the Working Capital Participant Deposits are adjusted each year to reflect any changes in the Annual Budget. The proportional allocation of these deposits are based on the participant's percentage in each Project or Program. Any additional deposit required is billed via the monthly All Resources Bill (ARB) and any Refund credit is deposited to the participant's account in the NCPA General Operating Reserve (GOR).

Please note calculations for the Lodi Energy Center have not been included based on the 60-day Operating Reserve requirement in the Power Sales Agreement (PSA) for that Project.

A summary of the proposed annual budget, analysis of the working capital deposit and funding requirement, and a copy of the PowerPoint presentation are attached.

FISCAL IMPACT:

The Executive Summary section of the budget document contains an analysis of the overall budget. Total proposed annual budget cost for FY2020 is approximately \$406.68 million, which represents an increase of 10.56% or a \$38.8 million dollar increase over the FY2019 budget as summarized in the attached schedule. Allocation of the FY2020 Annual Budget between members and LEC participants are based on participation levels on NCPA programs and projects and the approved cost allocations. Final funding allocation for each member is attached to this staff report and shown on pages 140-141 of the budget document.

The total calculated FY2020 Working Capital Deposit and Funding Requirements for the Annual Budget has increased \$461,701 or 0.048%. The increase is primarily from higher transmission

costs and load aggregation costs mostly attributed to Santa Clara (SVP). The attached schedule shows each participant's Additional Requirement Charge or (Refund). The Additional Requirement Charge will be billed on the next ARB following Commission approval, and Refunds of credit amounts will likewise be deposited into the applicable participant's individual GOR account.

ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

The Legislative and Regulatory (L&R) Committee reviewed the L&R Program budget at their meeting on February 20, 2019 and unanimously approved the proposed program budget and recommended approval by the full NCPA Commission.

The Facilities Committee reviewed the Generation Services (except LEC), Power Management and Administrative Services/Executive Services budget at their meetings on March 12, 2019 and April 3, 2019. The Committee unanimously recommended approval of the Generation Services budgets, Power Management budget, and Administrative and Executive Services Budget.

The Lodi Energy Center Participants Committee reviewed the project budget on February 11, 2019 and March 11, 2019 and unanimously recommended approval to the full Commission at the April 3, 2019 meeting.

Respectfully submitted,



RANDY S. HOWARD
General Manager

Attachments:

- Resolution 19-43
- Budget Summary
- Participant Funding Summary
- Pay Schedule
- Analysis of Working Capital Deposit and Funding Requirements

RESOLUTION 19-43

RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY ADOPTING THE FISCAL YEAR 2020 ANNUAL BUDGET AND WORKING CAPITAL DEPOSIT AND FUNDING REQUIREMENTS AND ADJUSTMENTS

(reference Staff Report #159:19)

WHEREAS, the Amended and Restated Northern California Power Agency Joint Powers Agreement ("the JPA") provides in Article III section 3 that,

"3. None of the debts, liabilities, or obligations of NCPA shall be the debts, liabilities or obligations of any of the parties to this [Joint Powers] Agreement unless assumed in a particular case by resolution of the governing body of the party to be charged"; and

WHEREAS, certain members have assumed obligations of NCPA through approval of agreements by their governing bodies, such as the project third phase agreements, the Pooling Agreement, the Facilities Agreement, the Power Management and Administrative Services Agreement, the Scheduling Coordination Program Agreement, etc.; and

WHEREAS, the JPA provides in Article IV section 3(a) that,

"3(a). Each party hereto agrees that it will annually contribute, in proportion to its respective total retail electric power load (or where no retail load exists, the consumptive power load, or where no consumptive power load exists, other suitable measure as approved by the Commission) for the previous calendar year, to a fund or budget of NCPA which may cover up to one-third of legislative and regulatory activities or other NCPA general expenses not covered by other agreements or revenue sources, as may be approved by the Commission; and that such annual cash contribution to said fund or budget by any party may be up to fifteen cents (\$0.15) per megawatt hour (MWh) of said total retail electric power load or consumptive power load, or where no consumptive power load exists, other suitable measure as approved by the Commission, as submitted by such party to the Federal Energy Regulatory Commission or other governmental regulatory authority"; and

WHEREAS, the Amended and Restated Rules of Procedure for the Commission of the Northern California Power Agency (the NCPA Bylaws) provide in section 11 that,

"11. Budgets.

(a) NCPA Budget. The General Manager shall, not later than at the regular Commission meeting in May of each year, present a proposed budget for the ensuing fiscal year to the Commission, together with a statement of the payments to be required from the Members by such budget. Such budget shall include the various NCPA Project budgets. The Commission shall adopt such budget by resolution, with any changes ordered by it, not later than the regular meeting in June"; and

WHEREAS, in accordance with the NCPA Bylaws, the General Manager of NCPA has presented a proposed budget for Fiscal Year 2020 (FY2020); and

WHEREAS, the proposed budget in accordance with the JPA includes a proposed charge to the members of \$0.15 per MWh for a total assessment pursuant to the JPA of \$1,422,065; and

WHEREAS, certain of the members of NCPA have from time to time entered into a variety of agreements for the development and operation of NCPA Projects and Programs by which said members have agreed to be responsible for the costs of said Projects and Programs; and

WHEREAS, costs for each of the NCPA Projects and NCPA Programs have been included in the proposed FY2020 NCPA Annual Budget, and the Participants in each such NCPA Project and NCPA Program acknowledge that approval of the NCPA Annual Budget constitutes approval of the annual budget for each of said Programs and Projects; and

WHEREAS, all other costs not included in the JPA assessment have been primarily incurred, by original design, either directly or indirectly on behalf of NCPA Projects or in support of NCPA Programs developed and approved by the members over the years; and

WHEREAS, Project and Program costs have been equitably allocated between and among the NCPA Projects and Programs and such equitable allocation methodology has been approved by the Commission in previous budgets and through specific studies and Commission actions via Resolution 10-16 (Power Management Costs), Resolution 10-106 (Legislative and Regulatory Costs); and

WHEREAS, all such costs are operating and maintenance costs within the meanings and descriptions provided in both the Third-Phase (Take-Or-Pay) Agreements and the Federal Energy Regulatory Commission (FERC) Uniform Chart of Accounts, used to account for the Projects; and

WHEREAS, the Project Participants in all NCPA Projects through recommendation of the NCPA Facilities Committee and the Lodi Energy Center Project Participant Committee have recommended approval of the FY2020 Annual Budget; and

WHEREAS, the participants in the Legislative and Regulatory Programs through recommendation of the Legislative and Regulatory Committee have recommended approval of the Legislative and Regulatory program budget as presented in the FY2020 Annual Budget; and

WHEREAS, the FY2020 Annual NCPA Budget is a comprehensive document that delineates, among other things, each member's fully allocated financial cost responsibility in connection with each and every service provided by the Agency through its various projects and programs; and

WHEREAS, the FY2020 Annual Budget for individual Projects as recommended by the respective Project participants of the various Projects and the related costs and revenues thereof are reflected in the Agency's proposed FY2020 Annual NCPA Budget; and

WHEREAS, the Agency provides Working Capital for its Projects and Programs through a combination of month ahead advanced billing, project financed deposits; and working capital participant deposits of 15 to 30 days' equivalencies; and

WHEREAS, the FY2020 Working Capital Deposit and Funding Requirement schedule shows each participant's Additional Requirement Charge or (Refund); and

WHEREAS, the Additional Requirement Charge will be billed on the next ARB following Commission approval, and Refunds of credit amounts will be deposited into the applicable participant's individual NCPA G.O.R. account; and

WHEREAS, the FY2020 Annual NCPA Budget document also contains certain proposed position changes, reclassifications and salary or pay schedules which also require Commission approval; and

NOW, THEREFORE, BE IT RESOLVED by the Commission of the Northern California Power Agency as follows:

Section 1. This Commission hereby finds and determines that the recitals contained herein above are true and correct.

Section 2. This Commission finds that the adoption of this resolution is exempt from the California Environmental Quality Act. It is not an action which will cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment (reference staff report 159:19).

Section 3. This Commission hereby irrevocably adopts, approves, and authorizes the program and project budgets which are an integral part of the FY2020 Annual Budget of the Agency, and it hereby irrevocably adopts, approves, and authorizes the FY2020 Annual Budget of the Agency. The Commission members hereby confirm their commitment and that of their respective member agencies, to provide funding of the FY2020 Annual Budget of the Agency in proportion to their individual shares therein, as shown in the attached summary of budget costs after full allocation of costs to all projects and programs of the Agency.

Section 4. This Commission hereby irrevocably adopts, approves, and authorizes the related participant charges or refunds from the analysis of the Working Capital Deposit and Funding Requirement schedule for FY2020.

Section 5. Notwithstanding the generality of the foregoing, the Commission does hereby approve the classification and position changes and salary or pay schedules as noted in the Annual Budget and authorizes the General Manager to implement such changes.

PASSED, ADOPTED and APPROVED this _____ day of _____, 2019 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

 ROGER FRITH
 CHAIRPERSON

ATTEST: _____
 CARY PADGETT
 ASSISTANT SECRETARY

**NORTHERN CALIFORNIA POWER AGENCY
ANNUAL BUDGETS**

	FISCAL YEAR ENDED JUNE 30			Budget %
	2019	Inc/(Dec)	Proposed 2020	
GENERATION RESOURCES				
NCPA Plants				
Hydroelectric	\$ 27,355,902	\$ 53,722	\$ 27,409,624	5.8%
Geothermal	6,948,236	(2,362,844)	4,585,392	1.0%
Combustion Turbine No. 1	7,533,357	(2,629,831)	4,903,526	1.0%
Combustion Turbine No. 2 (STIG)	7,242,922	(419,756)	6,823,166	1.4%
Lodi Energy Center	31,333,320	(11,354,932)	19,978,388	4.2%
Subtotal	80,413,737	(16,713,641)	63,700,096	13.4%
Member Resources - Energy				
Member Resources - Natural Gas	27,221,136	(1,329,853)	25,891,283	5.4%
Western Resource	713,470	(639,218)	74,252	0.0%
NCPA Contracts & Market Power Purchases	(1,811,284)	(705,967)	(2,517,251)	-0.5%
Load Aggregation Costs	818,707	(2,037,126)	(1,218,419)	-0.3%
Net GHG Obligations	142,529,660	113,499,933	256,029,593	53.8%
Subtotal	1,122,972	(626,017)	496,955	0.1%
TOTAL GENERATION RESOURCES	170,594,661	108,161,752	278,756,413	58.6%
	251,008,398	91,448,111	342,456,509	71.9%

TRANSMISSION				
Independent System Operator	3,662,271	(849,185)	2,813,086	0.6%
Grid Management Charge (GMC)	104,538,974	6,012,065	110,551,039	23.2%
GMC Wheeling	2,707,374	(559,968)	2,147,406	0.5%
Ancillary Services (AS)	1,549,274	(227,985)	1,321,289	0.3%
Other Charges	112,457,893	4,374,927	116,832,820	24.5%

MANAGEMENT SERVICES				
Legislative & Regulatory				
Legislative Representation	2,020,121	109,062	2,129,183	0.4%
Regulatory Representation	885,500	(138,229)	747,271	0.2%
Western Representation	845,251	(103,043)	742,208	0.2%
Customer Programs	432,561	(14,711)	417,850	0.1%
Subtotal	4,183,433	(146,921)	4,036,512	0.8%
Judicial Action				
Judicial Action Direct Cost to Programs	625,000	-	625,000	0.1%
Power Management				
System Control And Load Dispatch:				
Dispatch & Real-time Resource Management	2,395,829	36,713	2,432,543	0.5%
Schedule Coordination	2,504,765	107,278	2,612,044	0.5%
System Control And Data Acquisition	953,313	(134,360)	818,953	0.2%
WECC/NERC Compliance & Participation	235,065	(34,631)	200,434	0.0%
Subtotal	6,088,973	(24,999)	6,063,974	1.3%

NORTHERN CALIFORNIA POWER AGENCY
ANNUAL BUDGETS

	FISCAL YEAR ENDED JUNE 30			Budget %
	2019	Inc/(Dec)	Proposed 2020	
Continued				
Forecasting Planning, Prescheduling & Trading	642,926	(13,582)	629,345	0.1%
Forecasting	549,728	14,911	564,640	0.1%
Resource Planning, Optimization, Risk Analysis & Mgmt.	145,560	(932)	144,628	0.0%
Power & Fuel Transactions	841,100	1,602	842,702	0.2%
Pre-Scheduling	403,218	158,427	561,645	0.1%
Power Pool Oper. & Settlement Standards	182,105	(1,451)	180,654	0.0%
Facilities Agreement Administration	2,764,638	158,976	2,923,614	0.6%
Subtotal	436,383	(24,334)	412,049	0.1%
Industry Restructuring & Regulatory Affairs				
Contract Admin, interconnection Svcs & External Affairs:				
Contract Maint, Negotiation and Administration & Litigation	839,985	(166,166)	673,819	0.1%
TANC Representation & Advocacy	18,338	11,081	29,418	0.0%
Western Representation & Advocacy	164,680	(29,335)	135,344	0.0%
Pooling Agreement Coordination and Administration	105,641	3,514	109,155	0.0%
Subtotal	1,128,644	(180,907)	947,737	0.2%
Green Power Project	743	(743)	-	0.0%
Gas Purchase Program	77,420	(395)	77,025	0.0%
Market Purchase Power Project	106,857	(744)	106,113	0.0%
Power Management Direct Cost to Programs	(1,375,511)	11,001	(1,364,510)	-0.3%
Subtotal - Power Management	9,228,147	(62,145)	9,166,002	1.9%
Energy Risk Management				
ROC, RMC Meetings & Activities	109,299	(58,796)	50,503	0.0%
Counter-party Credit Review & Analysis	145,578	10,955	156,533	0.0%
Subtotal	254,877	(47,841)	207,036	0.0%
Settlements				
Deal Control Validation & Monitoring	358,828	36,862	395,690	0.1%
ISO Data Validation & Monitoring	571,408	1,662	579,070	0.1%
Subtotal	936,236	38,524	974,760	0.2%
Integrated Systems Support	269,160	(29,689)	239,471	0.1%
TOTAL MANAGEMENT SERVICES	15,426,230	(252,095)	15,174,135	3.2%
PARTICIPANT PASS THROUGH COSTS (TANC, DUES, ETC)	1,619,170	(58,723)	1,560,447	0.3%
SUPPORT SERVICES	42,316	1,369	43,685	0.0%
SUPPORT SERVICES REIMBURSEMENTS	(42,316)	(1,369)	(43,685)	0.0%
TOTAL NET ANNUAL BUDGET COST	\$ 380,511,691	\$ 95,512,220	\$ 476,023,911	100.0%
OTHER THIRD PARTY REVENUE				
PM Service Revenue (Allocated via Nexant methodology)	1,697,632	315,215	2,012,847	
PM Service Revenue (Allocated via A&G methodology)	188,626	35,024	223,650	
Member Owned Generation ISO Energy Revenue	-	67,107,648	67,107,648	
Revenue from Customers	10,785,006	(10,785,006)	-	
Subtotal	12,671,264	56,672,881	69,344,145	
TOTAL ADJUSTED NET ANNUAL BUDGET COST	\$ 367,840,427	\$ 38,839,339	\$ 406,679,766	

Northern California Power Agency
Participant Funding Requirements (Net)
FY 2020 Budget

GENERATION RESOURCES	Budget	Altamira	BART	Bljuys	Gridley	Healdsburg	Lodi	Lompoc	Palo Alto	Plumas Sierra	Port of Oakland	Redding	Roseville	Santa Clara	Shasta Lake	Truckee-Donner	Ukiah	TID	All Other
Hydro	\$27,499,624	\$2,991,626	\$ -	\$ -	\$ -	\$318,616	\$3,089,991	\$6,650,991	\$490,406	\$ -	\$ -	\$ -	\$2,041,088	\$10,738,127	\$ -	\$ -	\$891,972	\$ -	\$ -
Geothermal	4,603,230	792,930	10,579	15,786	172,459	172,459	484,518	172,791	32,943	484,518	172,791	32,943	386,619	1,994,427	286,032	446,720	446,720	286,032	446,720
Combustion Turbine No. 1	4,993,626	1,069,949	9,632	686,746	286,032	286,032	686,746	286,032	89,083	686,746	286,032	89,083	2,491,649	2,044,121	422,979	422,979	422,979	422,979	422,979
Combustion Turbine No. 2 (STIG)	19,879,383	1,296,402	1,683,245	63,452	465,232	385,124	2,895,151	340,065	186,104	2,895,151	340,065	186,104	6,099,411	6,099,411	20,875,067	1,724,219	285,032	285,032	8,056,216
Load Energy Center	63,777,934	6,061,687	1,683,245	83,664	489,247	1,166,250	9,095,990	1,943,514	6,656,991	798,537	257,188	257,188	4,301,255	20,875,067	1,724,219	285,032	285,032	285,032	8,056,216
Member Resources-Energy	25,891,283	4,061,376	-	930,851	-	-	930,851	-	20,641,860	-	-	-	-	-	-	-	18,542	-	-
Member Resources-Natural Gas	74,252	-	-	3,281	12,845	30,355	6,379	16,608	16,608	30,355	6,379	16,608	-	-	-	-	18,542	-	-
Western Resource	(190,827)	(190,827)	(33,384)	(85,172)	(33,534)	(33,534)	(85,172)	(33,219)	(1,641,193)	(33,219)	(80,645)	(80,645)	-	-	-	-	(46,115)	-	-
NCPA Contracts & Market Power Purchases	(12,184,419)	109,821	(812,604)	(1,002)	340,852	340,852	(86,801)	(33,219)	34,474,944	34,474,944	4,445,473	4,445,473	-	-	-	-	4,313,543	-	0
Load Aggregation Costs	266,028,593	19,573,417	16,795,172	643,421	1,396,750	2,969,706	233,433	5,304,148	34,474,944	34,474,944	4,445,473	4,445,473	-	-	-	-	4,313,543	-	0
Net GHG Obligations	459,985	283,522	-	-	-	-	233,433	-	-	-	-	-	-	-	-	-	-	-	-
	278,766,413	17,693,687	16,246,990	896,316	1,662,276	2,966,526	17,620,428	5,143,535	53,475,611	53,475,611	4,622,614	4,622,614	-	-	-	-	3,660,694	-	-
	343,474,407	23,644,354	17,809,435	893,980	2,160,523	4,162,777	26,716,049	7,032,049	60,126,593	60,126,593	6,512,319	6,512,319	-	-	-	-	5,284,713	-	-
TRANSMISSION																			
NCPA Plant Transmission *	(789)	(261)	-	(118)	(6)	(67)	(253)	(67)	(13)	(177)	(177)	(177)	(3,260)	(3,260)	-	-	(87)	(3,260)	(87)
Geothermal Plant 1	(17,109)	(4,676)	-	(118)	(8)	(1,064)	(1,658)	(1,064)	(17)	(1,658)	(1,658)	(1,658)	(3,207)	(3,207)	-	-	(1,625)	(3,207)	(1,625)
Geothermal Plant 2	(17,886)	(5,136)	-	(118)	(94)	(1,120)	(1,812)	(1,120)	(190)	(1,812)	(1,812)	(1,812)	(3,207)	(3,207)	-	-	(1,712)	(3,207)	(1,712)
Independent System Operator	116,832,820	\$6,287,851	10,149,719	464,302	760,414	1,833,486	10,850,693	3,181,631	21,130,739	21,130,739	2,890,377	2,890,377	-	-	-	-	2,803,997	-	2,803,997
	116,814,922	8,292,226	10,149,719	464,184	760,220	1,832,338	10,848,791	3,180,511	21,130,739	21,130,739	2,890,377	2,890,377	-	-	-	-	2,802,266	-	2,802,266
MANAGEMENT SERVICES																			
LEGISLATIVE & REGULATORY	1,469,072	79,640	-	56,349	61,916	56,739	86,688	60,330	126,948	126,948	59,225	115,688	164,683	376,610	66,928	62,893	68,668	-	68,668
Legislative Representation	616,596	27,851	-	17,671	19,220	19,562	30,396	21,394	46,266	46,266	20,435	40,603	64,352	131,616	23,489	22,106	20,691	-	20,691
Regulatory Representation	744,268	21,325	8,606	6,223	11,689	4,446	10,685	8,704	217,514	31,063	10,694	144,247	86,302	169,776	9,816	9,816	6,114	-	6,114
Western Representation	1,309,637	52,132	2,446	6,006	11,606	83,975	20,330	135,942	23,327	15,332	113,405	179,990	179,990	654,180	23,819	16,486	16,486	-	16,486
JPA Assessment	4,838,613	191,048	89,733	76,688	86,530	91,253	191,044	109,327	527,761	138,776	105,687	413,943	476,027	1,230,551	120,942	119,721	101,859	-	101,859
Judicial Action	660,353	66,631	832	2,386	4,399	11,097	62,649	17,410	117,993	17,499	16,616	-	20,084	166,343	-	-	16,484	2,031	16,484
Tariffs & Rates	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency **	560,353	55,831	832	2,386	4,399	11,097	62,649	17,410	117,993	17,499	16,616	-	20,084	166,343	-	-	16,484	2,031	16,484
POWER MANAGEMENT	10,404,121	979,797	820,189	62,880	98,764	192,707	1,000,028	322,796	1,761,083	355,986	491,980	-	494,392	3,169,852	-	-	325,693	166,689	325,693
Power Mgmt. SCALD, ISS,	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Energy Risk Mgmt & Settlements	77,025	10,890	28,172	10,823	10,898	10,790	12,319	11,443	21,514	21,514	10,898	144,247	86,302	169,776	9,816	9,816	6,114	-	6,114
Green Power Program	10,651,131	989,887	848,353	61,400	120,704	213,928	1,038,224	346,433	1,761,083	355,986	491,980	-	494,392	3,169,852	-	-	325,693	166,689	325,693
Market Purchase Program	10,651,131	989,887	848,353	61,400	120,704	213,928	1,038,224	346,433	1,761,083	355,986	491,980	-	494,392	3,169,852	-	-	325,693	166,689	325,693
Gas Purchase Program	15,174,125	1,256,265	918,922	193,374	213,934	316,278	1,491,927	471,159	2,406,817	612,655	812,655	413,943	393,483	4,245,677	120,942	119,721	464,539	440,839	464,539
TANC-SOT	89,000	35,304	190,000	4,780	4,046	4,046	35,341	4,959	129,516	3,978	-	-	20,084	166,343	-	-	16,484	2,031	16,484
Bank Consulting	47,900	22,802	118,300	1,183	3,949	6,797	25,208	12,644	39,947	39,947	12,644	45,356	52,846	71,246	11,474	12,894	9,385	-	9,385
Biggs GNV	314,461	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
SEPA Dues	19,000	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761
DEED Dues	24,259	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761	1,761
CEE Dues	10,000	667	667	667	667	667	667	667	667	667	667	667	667	667	667	667	667	667	667
Subscriptions	164,000	5,995	72,000	5,995	2,998	2,998	8,993	7,046	11,991	5,995	11,991	2,600	6,000	3,500	667	667	5,995	-	5,995
Customer Programs Projects **	91,667	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WVCs Certificate Transfer Fees **	6,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pass Through Costs	1,569,947	69,666	292,000	13,124	8,297	16,477	74,688	26,380	193,624	11,127	13,148	54,462	66,030	611,336	13,614	15,151	21,139	-	21,139
Support Services	43,695	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support Services Reimbursements	(49,595)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER THIRD PARTY REVENUE	(2,015,847)	(151,420)	(164,932)	(19,775)	(19,776)	(32,403)	(197,955)	(63,433)	(266,602)	(67,539)	(65,653)	-	(68,967)	(719,058)	-	-	(63,653)	(27,656)	(63,653)
PM Service Revenue (Nexant)	(225,550)	(23,655)	(23,655)	(886)	(2,548)	(6,577)	(30,189)	(8,068)	(16,487)	(15,153)	(14,779)	(908)	(16,388)	(64,855,528)	(387)	(334)	(264,513)	-	(264,513)
Member-Owned Connection ISO Energy Revenue	(87,497,548)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenue from Customers	(85,344,145)	(176,076)	(640,397)	(11,761)	(22,726)	(39,391)	(227,449)	(61,562)	(284,693)	(1,576,918)	(87,867)	(908)	(103,365)	(65,564,294)	(387)	(334)	(327,650)	-	(327,650)
JPA Assessment - Others	114,428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-NCPA Participants	(119,428)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Credits to Participants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NET ANNUAL BUDGET COST	\$ 406,676,766	\$ 33,042,759	\$ 29,484,431	\$ 1,254,699	\$ 3,107,919	\$ 6,286,897	\$ 38,098,769	\$ 10,706,821	\$ 83,741,322	\$ 8,467,190	\$ 7,959,670	\$ 487,761	\$ 5,824,644	\$ 162,266,872	\$ 131,468	\$ 131,468	\$ 131,484	\$ 8,044,011	\$ 8,056,146
FY2019 Net Annual Budget Cost	387,840,427	32,564,728	28,691,613	1,299,529	3,354,005	6,807,911	11,922,948	8,772,734	9,446,886	491,071	5,416,959	134,116	5,431,450	107,602,939	132,153	134,116	9,927,948	672,085	14,902,581
Incr (decr)	18,836,339	1,477,931	1,792,818	(44,830)	(246,086)	(521,014)	(28,167)	(1,666,919)	(77,514)	(1,668,719)	(1,487,216)	(33,345)	(606,806)	54,663,933	(686)	(2,647)	(1,283,937)	(167,669)	(6,834,935)

NORTHERN CALIFORNIA POWER AGENCY
ADMINISTRATIVE GENERAL WAGE STRUCTURE
Effective December 22, 2019

GRADE	JOB CLASSIFICATION/JOB FAMILY	MINIMUM		CONTROL POINT		CTRL PT PLUS 15%	
		ANNUAL	HOURLY	ANNUAL	HOURLY	ANNUAL	HOURLY
15	¹ ACCOUNTANT/ANALYST I	70,470	33.88	88,088	42.35	101,296	48.70
17	¹ ACCOUNTANT/ANALYST II	81,432	39.15	101,795	48.94	117,062	56.28
19	¹ ACCOUNTANT/ANALYST III	94,099	45.24	117,624	56.55	135,262	65.03
9	¹ ACCOUNTING CLERK I	45,656	21.95	57,075	27.44	65,624	31.55
11	¹ ACCOUNTING CLERK II	52,770	25.37	65,957	31.71	75,837	36.46
13	¹ ACCOUNTING CLERK III	60,965	29.31	76,211	36.64	87,651	42.14
9	¹ ADMINISTRATIVE ASSISTANT/OFFICE ADMINISTRATOR I	45,656	21.95	57,075	27.44	65,624	31.55
11	¹ ADMINISTRATIVE ASSISTANT/OFFICE ADMINISTRATOR II	52,770	25.37	65,957	31.71	75,837	36.46
13	¹ ADMINISTRATIVE ASSISTANT/OFFICE ADMINISTRATOR III	60,965	29.31	76,211	36.64	87,651	42.14
30	¹ AGM I/SENIOR DIRECTOR (E.g. Business Development)	208,499	100.24	260,624	125.30	299,707	144.09
31	¹ AGM II (E.g. Power Mgmt, Generation, Leg & Reg, CFO/Admin)	224,120	107.75	280,155	134.69	322,192	154.90
32	¹ AGM III	240,947	115.84	301,184	144.80	346,341	166.51
23	¹ ASSISTANT CONTROLLER	125,674	60.42	157,082	75.52	180,648	86.85
25	¹ ASSISTANT MANAGER: INFORMATION SERVICES	145,226	69.82	181,542	87.28	208,770	100.37
6E	¹ ASSISTANT, STUDENT I	28,309	13.61	35,402	17.02	40,706	19.57
6F	¹ ASSISTANT, STUDENT II	35,173	16.91	43,971	21.14	50,565	24.31
6G	¹ ASSISTANT, STUDENT III	43,722	21.02	54,642	26.27	62,837	30.21
6H	¹ ASSISTANT, STUDENT IV	50,502	24.28	63,128	30.35	72,592	34.90
14	¹ COMPUTER TECHNOLOGY ANALYST	65,541	31.51	81,931	39.39	94,224	45.30
17	¹ COMPUTER TECHNOLOGY ANALYST I	81,432	39.15	101,795	48.94	117,062	56.28
19	¹ COMPUTER TECHNOLOGY ANALYST II	94,099	45.24	117,624	56.55	135,262	65.03
21	¹ COMPUTER TECHNOLOGY ANALYST III	108,742	52.28	135,928	65.35	156,333	75.16
23	¹ COMPUTER TECHNOLOGY ANALYST IV	125,674	60.42	157,082	75.52	180,648	86.85
20	¹ ENERGY RESOURCE ANALYST III	101,150	48.63	126,443	60.79	145,413	69.91
16	¹ ENERGY RESOURCE ANALYST I	75,754	36.42	94,682	45.52	108,888	52.35
18	¹ ENERGY RESOURCE ANALYST II	87,526	42.08	109,429	52.61	125,840	60.50
23	¹ ENERGY RESOURCE ANALYST IV	125,674	60.42	157,082	75.52	180,648	86.85
16	¹ ENGINEER I	75,754	36.42	94,682	45.52	108,888	52.35
18	¹ ENGINEER II	87,526	42.08	109,429	52.61	125,840	60.50
20	¹ ENGINEER III	101,150	48.63	126,443	60.79	145,413	69.91
23	¹ ENGINEER IV	125,674	60.42	157,082	75.52	180,648	86.85
24	¹ ENGINEER V: SUPERVISING /PLANT	135,096	64.95	168,875	81.19	194,189	93.36
20	¹ ENVIRONMENTAL, HEALTH & SAFETY SPECIALIST	101,150	48.63	126,443	60.79	145,413	69.91
16	¹ EXECUTIVE ASSISTANT	75,754	36.42	94,682	45.52	108,888	52.35
31	¹ GENERAL COUNSEL	224,120	107.75	280,155	134.69	322,192	154.90
36	¹ GENERAL MANAGER	321,776	154.70	402,210	193.37	462,530	222.37
16	¹ GEOLOGIST I	75,754	36.42	94,682	45.52	108,888	52.35
18	¹ GEOLOGIST II	87,526	42.08	109,429	52.61	125,840	60.50
20	¹ GEOLOGIST III	101,150	48.63	126,443	60.79	145,413	69.91
23	¹ GEOLOGIST IV	125,674	60.42	157,082	75.52	180,648	86.85
24	¹ GEOLOGIST V	135,096	64.95	168,875	81.19	194,189	93.36
16	¹ GOVERNMENT RELATIONS REPRESENTATIVE I	75,754	36.42	94,682	45.52	108,888	52.35
18	¹ GOVERNMENT RELATIONS REPRESENTATIVE II	87,526	42.08	109,429	52.61	125,840	60.50
20	¹ GOVERNMENT RELATIONS REPRESENTATIVE III	101,150	48.63	126,443	60.79	145,413	69.91
22	¹ GOVERNMENT RELATIONS REPRESENTATIVE IV	116,896	56.20	146,120	70.25	168,043	80.79
16	¹ HUMAN RESOURCES ANALYST I	75,754	36.42	94,682	45.52	108,888	52.35
18	¹ HUMAN RESOURCES ANALYST II	87,526	42.08	109,429	52.61	125,840	60.50
20	¹ HUMAN RESOURCES ANALYST III	101,150	48.63	126,443	60.79	145,413	69.91
13	¹ HUMAN RESOURCES ASSISTANT	60,965	29.31	76,211	36.64	87,651	42.14
27	¹ HUMAN RESOURCES DIRECTOR	167,835	80.69	209,789	100.86	241,259	115.99
25	¹ HUMAN RESOURCES MANAGER	145,226	69.82	181,542	87.28	208,770	100.37
13	¹ LEGISLATIVE PROGRAM ASSISTANT	60,965	29.31	76,211	36.64	87,651	42.14
27	¹ MANAGER, INFORMATION SERVICES	167,835	80.69	209,789	100.86	241,259	115.99
27	¹ MANAGER, INFORMATION SERVICES & POWER SETTLEMENTS	167,835	80.69	209,789	100.86	241,259	115.99
29	¹ MANAGER, PLANT	193,939	93.24	242,424	116.55	278,803	134.04

**NORTHERN CALIFORNIA POWER AGENCY
ADMINISTRATIVE GENERAL WAGE STRUCTURE
Effective December 22, 2019**

GRADE	JOB CLASSIFICATION/JOB FAMILY	MINIMUM		CONTROL POINT		CTRL PT PLUS 15%	
		ANNUAL	HOURLY	ANNUAL	HOURLY	ANNUAL	HOURLY
25	¹ MANAGER, REGULATORY PROGRAM	145,226	69.82	181,542	87.28	208,770	100.37
26	¹ MANAGER, RELIABILITY COMPLIANCE	156,125	75.06	195,146	93.82	224,411	107.89
17	¹ MATERIALS/WAREHOUSE COORDINATOR I	81,432	39.15	101,795	48.94	117,062	56.28
19	¹ MATERIALS/WAREHOUSE COORDINATOR II	94,099	45.24	117,624	56.55	135,262	65.03
7	¹ OFFICE ASSISTANT I	39,499	18.99	49,379	23.74	56,784	27.30
9	¹ OFFICE ASSISTANT II	45,656	21.95	57,075	27.44	65,624	31.55
16	¹ POWER SETTLEMENTS ANALYST I	75,754	36.42	94,682	45.52	108,888	52.35
18	¹ POWER SETTLEMENTS ANALYST II	87,526	42.08	109,429	52.61	125,840	60.50
20	¹ POWER SETTLEMENTS ANALYST III	101,150	48.63	126,443	60.79	145,413	69.91
25	¹ POWER SETTLEMENTS MANAGER	145,226	69.82	181,542	87.28	208,770	100.37
23	¹ SCHEDULER/PLANNER, POWER	125,674	60.42	157,082	75.52	180,648	86.85
23	¹ SENIOR COMPUTER TECH. ANALYST, POWER (E.g. BILLING)	125,674	60.42	157,082	75.52	180,648	86.85
18	¹ SHAREPOINT ADMINISTRATOR	87,526	42.08	109,429	52.61	125,840	60.50
4	¹ STUDENT HELPER (OFFICE/PLANT)	31,803	15.29	39,749	19.11	45,718	21.98
27	¹ SUPERINTENDENT, GENERATION RESOURCES	167,835	80.69	209,789	100.86	241,259	115.99
22	¹ SUPERVISOR I, POWER SETTLEMENTS	116,896	56.20	146,120	70.25	168,043	80.79
20	¹ SUPERVISOR I, (CHEMICAL, GENERAL SERVICES)	101,150	48.63	126,443	60.79	145,413	69.91
24	¹ SUPERVISOR II, (PLANT, ENERGY RISK, ENGINEERING)	135,096	64.95	168,875	81.19	194,189	93.36
27	¹ SUPERVISOR III, (POWER MGT., COORD. OP, REG/ENV COMP, ENGR)	167,835	80.69	209,789	100.86	241,259	115.99
27	¹ TREASURER-CONTROLLER	167,835	80.69	209,789	100.86	241,259	115.99
HEA	² HYDRO TECH APPRENTICE	68,869	33.11	94,141	45.26		
HEA	² HYDRO TECH	101,670	48.88	131,560	63.25		
HEA	² HYDRO TECH - DESIGNATED SKILLS	141,024	67.80	141,024	67.80		
HEA	² HYDRO TECH OPERATOR	138,154	66.42	138,154	66.42		
HEA	² HYDRO TECH OPERATOR - DESIGNATED SKILLS	148,075	71.19	148,075	71.19		
IBEW	² CT SPECIALIST I - VI	97,198	46.73	144,851	69.64		
IBEW	² CT SPECIALIST - LEAD	141,814	68.18	152,090	73.12		
IBEW	² CT SPECIALIST I - V (OPERATORS)	99,486	47.83	138,278	66.48		
IBEW	² CT SPECIALIST I - V (OPERATORS) LEAD	145,184	69.80	145,184	69.80		
IBEW	² MECHANIC OPERATOR I - V	97,198	46.73	127,046	61.08		
IBEW	² MECHANIC OPERATOR - LEAD	133,390	64.13	133,390	64.13		
IBEW	² OPERATOR TECHNICIAN I - V	99,486	47.83	133,474	64.17		
IBEW	² OPERATOR TECHNICIAN - LEAD	140,150	67.38	140,150	67.38		
IBEW	² STOREKEEPER I - V	65,894	31.68	79,040	38.00		
IBEW	² TECHNICIAN CHEMICAL/PERFORMANCE	120,286	57.83	120,286	57.83		
IBEW	² TECHNICIAN OPERATOR I - VI	97,198	46.73	144,248	69.35		
IBEW	² TECHNICIAN OPERATOR - LEAD	141,211	67.89	151,466	72.82		
	³ SCHEDULE COORDINATOR I	73,528	35.35	98,197	47.21		
	³ SCHEDULE COORDINATOR II	103,355	49.69	119,662	57.53		
	³ SCHEDULE COORDINATOR III	125,299	60.24	144,810	69.62		
	³ SYSTEM DISPATCHER	114,192	54.90	159,806	76.83		
	³ SYSTEM DISPATCHER, LEAD	125,299	60.24	167,794	80.67		

Note ¹ Non-union employees whose whose salaries exceed the control may be granted a lump sum merit increase which is not added to base pay.

Note ² IBEW = International Brotherhood of Electrical Workers

HEA = Hydroelectric Employees Association

These are union classifications subject to the Memorandum of Understanding and overtime, shift differential, relief premium, upgrade and travel pay may be added to base pay when appropriate.

Note ³ Schedule Coordinators and Dispatchers receive overtime, relief pay in addition to step increases.

**Northern California Power Agency
Analysis of Working Capital Requirements
FY 2020 Budget**

Annual Budget Cost	Proposed (A)	30 Days Working Capital			Add'l Rqmnt (Excess Rqmnt)	Memorandum Only
		FYE 2019 Balance		Total		
		From Bonds	Operations			
\$ 51,099,153	\$ 4,199,930	\$ 100,000	\$ 3,914,288	\$ 4,014,288	\$ 185,642	\$ 6,299,896
35,218,533	2,894,674		2,821,815	2,821,815	72,859	4,342,011
6,169,530	507,085		312,797	312,797	194,287	760,627
9,438,409	775,760	1,000,000	(281,409)	718,591	57,169	1,163,639
94,399,317						
56,228,967						
3,540,898						
23,325,119						
15,123,482	\$ 96,197		119,532	119,532	(23,335)	(1,103,037)
256,029,593						
496,955						61,268
551,069,956	8,473,646	1,100,000	6,887,023	7,987,023	486,822	
TRANSMISSION						
Hydroelectric	2,974,948	244,516	247,891	247,891	(3,375)	366,774
Geothermal Plant No. 1	54,399	4,471	4,512	4,512	(41)	6,707
Geothermal Plant No. 2	38,079	3,130	3,159	3,159	(29)	4,695
ISO (E)	117,088,855					
	120,156,281		255,562	255,562	(3,445)	
MANAGEMENT SERVICES						
Legislative Representation	2,132,130	175,244	166,280	166,280	8,964	262,865
Regulatory Representation	748,387	61,511	72,873	72,873	(11,361)	92,267
Western Representation	745,117	61,242	69,712	69,712	(8,469)	91,864
Customer Programs	423,678	34,823	36,032	36,032	(1,209)	52,234
Judicial Action (F)	625,000					
System Control and Load Dispatch	6,082,417	499,925	501,979	501,979	(2,055)	749,887
Forecasting & Rescheduling	2,934,143	241,162	228,096	228,096	13,067	361,744
Industrial Restructuring & Reg Affairs	414,479	34,067	36,067	36,067	(2,000)	51,100
Contract Administration	953,716	78,388	93,257	93,257	(14,869)	117,581
Green Power Project			244	244	(244)	
Gas Purchase Program	77,386	6,360	6,393	6,393	(32)	9,541
Market Purchase Program	111,270	9,145	9,207	9,207	(61)	13,718
Power Management Direct Cost to Prgram	(1,439,156)					(177,430)
Energy Risk Management	211,744	17,404	21,336	21,336	(3,932)	26,105
Settlements	979,916	80,541	77,375	77,375	3,166	120,812
Integrated Systems Support	243,161	19,986	22,426	22,426	(2,440)	29,979
Customer Programs Projects	1,556,709					
	16,800,097	1,319,798	-	1,341,274	(21,476)	
	\$ 688,026,334	\$ 10,045,561	\$ 1,100,000	\$ 8,483,860	\$ 9,583,860	\$ 13,704,847

The FY 20 working capital of \$10,045,561 represents approximately a 30 day requirement of the proposed budget, excluding the ISO. A 45 day requirement (1/8 of a year) is a utility standard rule of thumb and covers a 15th of the month billing for the previous month with 30 days to pay. Proposed amounts represent 30/365 of the FY20 budget. This was done to ensure that a minimum of 30 days working capital is maintained for each program.

- (A) Represents specific contract amounts either billed directly to participants or advance billed through NCPA. No working capital considered necessary.
- (B) Western energy, O&M and Restoration Fund requirements are billed on an estimated basis with payment generally required 15 to 30 days after month end. No working capital considered necessary.
- (C) Market power purchase requirements are billed on an estimated basis with payment generally required 15 to 30 days after month end. The above proposed represents approximately 15 days working capital based on current budget purchase estimates.
- (D) ISO costs are secured by SC Program Agreement required participant deposits. No additional working capital considered necessary.
- (E) Judicial Action costs are primarily legal costs associated with Legislative, Regulatory and Pooling program issues. No additional working capital considered necessary.
- (F) The project maintains a separate O&M Reserve to cover working capital requirements. See also PIMO schedule 5.0.
- (G) Load Aggregation Costs - CAISO are offset by energy sales through ISO. No working capital considered necessary.
- (H) GOR commitments cover Net GHG allowances. No working capital considered necessary.
- (I) GOR commitments cover Net GHG allowances. No working capital considered necessary.

**Northern California Power Agency
Working Capital Deposit and FY 2020 Funding Requirement**

Participant	Total Deposit On Hand	FY 2020 Budget Funding Requirement	Additional Requirement Charge (Refund)
Alameda	\$ 1,219,952	\$ 1,302,148	\$ 82,196
BART	164,776	144,599	(20,177)
Biggs	25,838	26,096	258
Gridley	36,136	36,230	94
Healdsburg	226,729	243,343	16,614
Lodi	1,203,894	1,275,094	71,200
Lompoc	306,775	326,300	19,525
Palo Alto	1,189,125	1,226,570	37,445
Plumas Sierra	146,010	152,288	6,278
Port of Oakland	50,365	49,721	(644)
Redding	35,132	33,213	(1,919)
Roseville	1,081,527	1,128,238	46,711
SVP	3,348,425	3,523,718	175,293
Shasta Lake	13,194	13,005	(189)
Truckee Donner	13,575	13,279	(296)
TID	192,454	196,939	4,485
Ukiah	329,953	354,780	24,827
	\$ 9,583,860	\$ 10,045,561	\$ 461,701



Commission Staff Report

May 14, 2019

COMMISSION MEETING DATE: May 23, 2019

SUBJECT: Approval of Substitution of Credit Facilities for the Hydroelectric 2008 Series A Refunding Bonds (Variable Rate Demand Obligations)

AGENDA CATEGORY: Discussion/Action

FROM: Monty Hanks <i>MA</i> Assistant General Manager/CFO	METHOD OF SELECTION: N/A
Division: Administrative Services	
Department: Accounting & Finance	

IMPACTED MEMBERS:

All Members	<input type="checkbox"/>	City of Lodi	<input checked="" type="checkbox"/>	City of Shasta Lake	<input type="checkbox"/>
Alameda Municipal Power	<input checked="" type="checkbox"/>	City of Lompoc	<input checked="" type="checkbox"/>	City of Ukiah	<input checked="" type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Palo Alto	<input checked="" type="checkbox"/>	Plumas-Sierra REC	<input checked="" type="checkbox"/>
City of Biggs	<input checked="" type="checkbox"/>	City of Redding	<input type="checkbox"/>	Port of Oakland	<input type="checkbox"/>
City of Gridley	<input checked="" type="checkbox"/>	City of Roseville	<input checked="" type="checkbox"/>	Truckee Donner PUD	<input type="checkbox"/>
City of Healdsburg	<input checked="" type="checkbox"/>	City of Santa Clara	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>

If other, please specify

RECOMMENDATION:

Staff recommends the Commission approve Resolution 19-44 authorizing the substitution of credit facilities for the 2008 Series A Hydroelectric bonds including non-substantive changes to the issuing documents and delegating the General Manager and other NCPA officials the authority to execute the related legal documents.

BACKGROUND:

In 2008, NCPA refunded the 1998 Hydroelectric bonds as variable rate demand bonds. The interest rate paid on the bonds resets weekly and requires a credit facility (letter of credit/LOC) for bondholders to 'put' the bonds back to the bank if they no longer want to hold them. Today, the LOC provider is the Bank of Montreal (BMO) and the credit facility is set to expire in September 2019. Normally, this requires an update to the Official Statement but since NCPA refunded the 2010 Series A Hydroelectric bonds in April of 2019, the information and ratings in the Official Statement are considered current. It's advantageous to replace the LOC now rather than wait closer to the expiration date because waiting would require another update to the Official Statement.

At the direction of the Finance Committee, staff, with the assistance of our financial advisor, PFM, issued a request for proposal (RFP) from qualified banks to provide a replacement credit facility for the 2008 Hydroelectric bonds. The RFP was sent to several banks and 9 (nine) responses were received. At the February 2019 Finance Committee, staff reviewed these responses and the Committee recommended NCPA negotiate with Bank of America for a replacement LOC. This substitution will allow an early termination of the BMO agreement (no termination fee is required) and notice to the bondholders. The terms of the LOC require an annual payment to Bank of America of 35 basis points (compared to previous agreement of 39 basis points) for a period of five years.

FISCAL IMPACT:

Cost of Issuance for the liquidity substitution is estimated to be \$200,000 which includes costs for bond and disclosure counsel, tax counsel, bank counsel, publishing fees, and financial advisor fees. While this item was not included in the FY2019 budget, there are sufficient funds available due to the release of Hydro bond funds no longer required for the trustee to hold as debt service reserves. A budget augmentation is not required with this action.

ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

The recommendation was reviewed by the Finance Committee on May 7, 2019 and was recommended for Commission approval.

Respectfully submitted,



RANDY S. HOWARD
General Manager

Attachments:
Resolution 19-44
Remarketing Memorandum
Letter of Credit Reimbursement Agreement
Fee Letter
Irrevocable Transferable Letter of Credit

RESOLUTION 19-44

RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY AUTHORIZING AND APPROVING THE SUBSTITUTION OF CREDIT FACILITY IN CONNECTION WITH THE HYDROELECTRIC PROJECT NUMBER ONE REVENUE BONDS, 2008 REFUNDING SERIES A; AND AUTHORIZING CERTAIN OTHER MATTERS RELATING THERETO

(Reference Staff Report #160:19)

WHEREAS, the Northern California Power Agency (“NCPA”) is a public entity duly organized and existing pursuant to the Amended and Restated Northern California Power Agency Joint Powers Agreement, dated as of January 1, 2008, as supplemented (the “Agreement”) and the provisions relating to the Joint Exercise of Powers Act constituting Chapter 5 of Division 7 of Title 1 of the Government Code of the State of California; and

WHEREAS, NCPA has issued its Hydroelectric Project Number One Revenue Bonds, 2008 Refunding Series A (the “2008 Series A Bonds”), pursuant to the Indenture of Trust, dated as of March 1, 1985, as amended and supplemented (the “Indenture”), between NCPA and U.S. Bank National Association, as successor trustee (the “Trustee”); and

WHEREAS, the payment of the 2008 Series A Bonds is currently secured by, and liquidity support for the 2008 Series A Bonds is currently provided by, an irrevocable, direct-pay letter of credit (the “2014 Bank of Montreal 2008 Series A Credit Facility”), issued by Bank of Montreal, acting through its Chicago Branch (“Bank of Montreal”) pursuant to a Letter of Credit Reimbursement Agreement, dated as of September 1, 2014 (the “2014 Bank of Montreal 2008 Series A Reimbursement Agreement”), between NCPA and Bank of Montreal; and

WHEREAS, the 2014 Bank of Montreal 2008 Series A Credit Facility has a stated expiration date of September 9, 2019, and NCPA has determined that it is in the best economic interests of NCPA and the Project Participants (capitalized terms used herein and not otherwise defined shall the meanings given such terms pursuant to the Indenture) to provide credit enhancement and liquidity support for the 2008 Series A Bonds through an irrevocable direct-pay letter of credit (the “BANA 2008 Series A Credit Facility”) to be issued by Bank of America, N.A. (“BANA”) pursuant to a Letter of Credit and Reimbursement Agreement and a related Fee Letter, to be entered into between NCPA and BANA (such Letter of Credit Reimbursement Agreement and related Fee Letter, in the respective forms presented to this meeting with such changes, insertions and deletions as are made pursuant to this Resolution being referred to herein collectively as the “BANA 2008 Series A Reimbursement Agreement”); and

WHEREAS, the 2008 Series A Bonds will be subject to mandatory tender in connection with the replacement of the credit facility therefor and the reoffering to the public of such 2008 Series A Bonds secured by the BANA 2008 Series A Credit Facility is to be made pursuant to a Remarketing Memorandum (such Remarketing Memorandum in the form presented to this meeting with such changes, insertions and deletions as are made pursuant to this Resolution, being referred to herein as the “Remarketing Memorandum”); and

WHEREAS, fees and expenses payable by NCPA in connection with the replacement of the 2014 Bank of Montreal 2008 Series A Credit Facility and the reoffering of the 2008 Series A Bonds (estimated to be approximately \$200,000 including costs of attorneys and other

consultants), at the direction of the General Manager, the Assistant General Manager, Finance and Administrative Services/Chief Financial Officer or the Treasurer-Controller of NCPA, are to be funded from [certain amounts made available to NCPA in connection with the issuance of its Hydroelectric Project Number One Revenue Bonds, 2019 Refunding Series A from the release of the 2010 Series Debt Service Reserve Account under the Indenture, as authorized pursuant to Resolution No. 19-13, adopted by the Commission on February 21, 2019 (“Resolution No. 19-13”)]; and

WHEREAS, there have been prepared and submitted to this meeting drafts of the following:

- (1) the BANA 2008 Series A Reimbursement Agreement and Fee Letter; and
- (2) the Remarketing Memorandum.

NOW, THEREFORE, BE IT RESOLVED by the Commission of the Northern California Power Agency, as follows:

Section 1. The BANA 2008 Series A Reimbursement Agreement (including the related Fee Letter as a part thereof), in substantially the form submitted to this meeting and made a part hereof as though set forth in full herein, be and the same is hereby approved. Each of the Chairman of this Commission (the “Chairman”), the General Manager of NCPA (the “General Manager”), the Assistant General Manager, Finance and Administrative Services/Chief Financial Officer, and the Treasurer-Controller of NCPA (each an “Authorized Officer”), acting singly, is hereby authorized to execute and deliver the BANA 2008 Series A Reimbursement Agreement (and related Fee Letter as a part thereof), in the name of and on behalf of NCPA, in the form presented to this meeting with such changes, insertions and deletions as may be consistent with this Resolution and the determinations made pursuant hereto and as may be approved by the Authorized Officer executing the 2008 Series A Reimbursement Agreement (and related Fee Letter as a part thereof), said execution being conclusive evidence of such approval.

Section 2. Each of the Authorized Officers, acting singly, is hereby authorized to take all actions necessary or required under the Indenture, the BANA 2008 Series A Reimbursement Agreement and the 2014 Bank of Montreal 2008 Series A Reimbursement Agreement and the related documents to provide for the substitution of the BANA 2008 Series A Credit Facility for and in replacement of the 2014 Bank of Montreal 2008 Series A Credit Facility.

Section 3. The Remarketing Memorandum, in substantially the form presented to this meeting and made a part hereof as though set forth in full herein, be and the same is hereby approved and the distribution, including the distribution in electronic form, of the Remarketing Memorandum in connection with the reoffering of the 2008 Series A Bonds by Citigroup Global Markets Inc. as the remarketing agent (the “Remarketing Agent”) for such 2008 Series A Bonds, is hereby authorized and approved. Each of the Chairman and the General Manager of NCPA, acting singly, is hereby authorized to execute the Remarketing Memorandum and any amendment or supplement thereto, in the name and on behalf of NCPA, and thereupon to cause the Remarketing Memorandum and any such amendment or supplement to be delivered to the Remarketing Agent, with such execution being conclusive evidence of the approval thereof.

Section 4. The Treasurer-Controller of NCPA and the Administrative Assistant to the Assistant General Manager, Finance and Administrative Services/Chief Financial Officer are each hereby appointed as an Assistant Secretary for the purpose of executing any documents, making

any attestation or certification on behalf of NCPA or taking any other action necessary or convenient in carrying out the transactions contemplated by this Resolution.

Section 5. The Chairman and the Vice Chairman of the Commission, and the Authorized Officers, acting singly, be and each of them hereby is authorized to execute and deliver any and all documents and instruments and to do and cause to be done any and all acts and things necessary or convenient in carrying out the transactions contemplated by this Resolution or the documents and instruments approved or authorized by this Resolution, including, but not limited to, (i) executing and delivering a tax certificate or supplemental tax certificate relating to the 2008 Series A Bonds, if applicable; (ii) executing and delivering and entering into any amendments to the supplemental indenture or remarketing agreement relating to the 2008 Series A Bonds as shall be requested by any rating agency, the Remarketing Agent, the 2008 Series A Credit Provider or any other entity if such changes are determined by the General Manager or the Assistant General Manager, Finance and Administrative Services/Chief Financial Officer to be necessary or advisable; (iii) providing for the giving of written directions and notices or the securing of any required third party approvals required by the Indenture, the BANA 2008 Series A Reimbursement Agreement, the 2014 Bank of Montreal 2008 Series A Reimbursement Agreement or other documents related to the 2008 Series A Bonds; and (iv) making any determinations or submission of any documents or reports which are required by any rule or regulation of any governmental entity, in each case in connection with the substitution of the BANA 2008 Series A Credit Facility for and in replacement of the 2014 Bank of Montreal 2008 Series A Credit Facility, the reoffering of the 2008 Series A Bonds, and/or the authorization, execution, delivery and performance by NCPA of its obligations under the documents and instruments approved or authorized by this Resolution and the other transactions contemplated by this Resolution. The Secretary or an Assistant Secretary of NCPA is hereby authorized to affix the seal of NCPA and attest to any of the documents approved or authorized pursuant to this Resolution.

Section 6. All actions heretofore taken by any committee of the Commission, or any officer, representative or agent of NCPA, in connection with the substitution of the BANA 2008 Series A Credit Facility for and in replacement of the 2014 Bank of Montreal 2008 Series A Credit Facility, or in the performance of NCPA's obligations under the Indenture, the BANA 2008 Series A Reimbursement Agreement, the 2014 Bank of Montreal 2008 Series A Reimbursement Agreement or other documents related to the 2008 Series A Bonds, or the authorization, execution, delivery or performance of NCPA's obligations under the documents and instruments approved or authorized by this Resolution and the other actions contemplated by this Resolution are hereby ratified, approved and confirmed.

Section 7. This Resolution shall take effect immediately upon its adoption.

PASSED, ADOPTED and APPROVED this _____ day of _____, 2019 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

ROGER FRITH
CHAIR

ATTEST: CARY A. PADGETT
ASSISTANT SECRETARY

Attachments to Item #17

- Remarketing Memorandum
- Letter of Credit Reimbursement Agreement
- Fee Letter
- The Irrevocable Transferable Letter of Credit

A copy of the Attachments can be viewed on NCPA's website www.ncpa.com or by logging on to NCPA Connect.

REMARKETING MEMORANDUM

REMARKETED ISSUE—FULL BOOK-ENTRY ONLY

RATINGS: (See “RATINGS” herein.)

\$85,160,000
Northern California Power Agency
Hydroelectric Project Number One Revenue Bonds
2008 Refunding Series A
(Variable Rate Demand Bonds)

Dated: Date of Delivery

Dated, Priced and Due as set forth on the inside cover

This cover page contains certain information for general reference only. It is not intended to be a summary of the security or terms of the 2008 Bonds. Investors are advised to read the entire Remarketing Memorandum to obtain information essential to the making of an informed investment decision. Capitalized terms used on this cover page not otherwise defined will have the meanings set forth herein.

The Hydroelectric Project Number One Revenue Bonds, 2008 Refunding Series A (the “2008 Bonds”) were issued by the Northern California Power Agency (“NCPA”) pursuant to an Indenture of Trust, dated as of March 1, 1985, as amended and supplemented, including as supplemented by the Sixteenth Supplemental Indenture of Trust, dated as of April 1, 2008 (collectively, the “Indenture”), by and between NCPA and U.S. Bank National Association, as successor trustee (the “Trustee”). This Remarketing Memorandum is furnished by NCPA to provide certain information in connection with the remarketing of the 2008 Bonds upon the mandatory tender thereof on [June 24], 2019 in connection with the delivery of a replacement Letter of Credit (as hereinafter defined) for such 2008 Bonds, as more fully described herein.

The 2008 Bonds were issued as fully registered bonds and are registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC acts as securities depository for the 2008 Bonds. Individual purchases of the 2008 Bonds will be made in book-entry form only. Payments of principal or Tender Price of, premium, if any, and interest on the 2008 Bonds are payable by the Trustee to DTC, which is obligated in turn to remit such principal or Tender Price of, premium, if any, and interest to its DTC Participants for subsequent disbursement to the beneficial owners of the 2008 Bonds, as described herein. See “APPENDIX C – BOOK-ENTRY ONLY SYSTEM.”

The 2008 Bonds currently bear interest in a Weekly Rate Period and will continue in a Weekly Rate Period until converted to another Rate Period as provided herein. THIS REMARKETING MEMORANDUM IS NOT INTENDED TO PROVIDE INFORMATION WITH RESPECT TO THE 2008 BONDS (INCLUDING THE TERMS OF SUCH 2008 BONDS THAT CHANGE BASED ON THE INTEREST RATE PERIOD FOR SUCH 2008 BONDS) AFTER CONVERSION FROM A WEEKLY RATE PERIOD TO ANOTHER INTEREST RATE PERIOD OR IF SUCH 2008 BONDS ARE NO LONGER SECURED BY THE LETTER OF CREDIT.

While bearing interest in a Weekly Rate Period, the 2008 Bonds will be delivered in denominations of \$100,000 and any integral multiple of \$5,000 in excess of \$100,000. Interest on the 2008 Bonds will be payable on January 1 and July 1 of each year. The first interest payment date following the remarketing of the 2008 Bonds as described herein will be July 1, 2019.

The 2008 Bonds are subject to optional, extraordinary and mandatory redemption prior to maturity, to mandatory tender on the dates and under the circumstances described herein and, while bearing interest in a Weekly Rate Period, to optional tender, all as described herein.

On [June 24], 2019, an irrevocable direct-pay letter of credit for the benefit of the 2008 Bonds (the “Letter of Credit”) issued by Bank of America, N.A. (the “Bank”) is expected to replace the existing irrevocable direct-pay letter of credit issued on September 10, 2014, by the Bank of Montreal, acting through its Chicago Branch. Payments of principal and redemption price of and interest on the 2008 Bonds will be supported by the Letter of Credit to be issued in favor of the Trustee for the benefit of the registered owners of the 2008 Bonds on the effective date of the Letter of Credit. The Trustee will be instructed to draw upon the Letter of Credit to pay such principal and redemption price of and interest on the 2008 Bonds. The Tender Agent may also draw funds under the Letter of Credit to pay the Tender Price of the 2008 Bonds tendered for payment and not remarketed. The Letter of Credit has a scheduled termination date of [June __, 2024], subject to earlier termination under conditions described in the Letter of Credit. See “THE LETTER OF CREDIT AND REIMBURSEMENT AGREEMENT” and “CERTAIN INFORMATION CONCERNING THE BANK.” See also “APPENDIX G – FORM OF THE LETTER OF CREDIT.”

[BANK LOGO]

THE 2008 BONDS ARE SPECIAL, LIMITED OBLIGATIONS OF NCPA. THE 2008 BONDS ARE PAYABLE SOLELY FROM DRAWINGS UNDER THE LETTER OF CREDIT AND THE TRUST ESTATE, AND ARE SECURED SOLELY BY DRAWINGS UNDER THE LETTER OF CREDIT AND A PLEDGE AND ASSIGNMENT OF THE TRUST ESTATE, CONSISTING PRIMARILY OF THE NCPA REVENUES (AS DEFINED HEREIN) AND THE OTHER FUNDS PLEDGED BY NCPA UNDER THE INDENTURE. THE 2008 BONDS DO NOT CONSTITUTE A CHARGE AGAINST THE GENERAL CREDIT OF NCPA. THE 2008 BONDS ARE NOT DEBTS, LIABILITIES OR OBLIGATIONS OF THE STATE OF CALIFORNIA, ANY PUBLIC AGENCY THEREOF (OTHER THAN NCPA), ANY MEMBER OF NCPA OR ANY PROJECT PARTICIPANT AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF ANY OF THE FOREGOING (INCLUDING NCPA) IS PLEDGED FOR THE PAYMENT OF THE 2008 BONDS. NCPA HAS NO TAXING POWER.

On April 2, 2008, the date of the original issuance of the 2008 Bonds, Orrick, Herrington & Sutcliffe LLP (the “Original Bond Counsel”) rendered its opinion, among other things, that based on an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2008 Bonds was excluded from gross income of the owners thereof for federal income tax purposes and was exempt from personal income taxes of the State of California. A copy of the opinion of Original Bond Counsel delivered in connection with the original issuance of the 2008 Bonds is attached hereto as APPENDIX E. The opinion of Original Bond Counsel has not been updated as of the date of this Remarketing Memorandum. Norton Rose Fulbright US LLP, Bond Counsel to NCPA in connection with the remarketing, will render an opinion to the effect that the delivery of the replacement Letter of Credit for the 2008 Bonds will not adversely affect any exclusion of interest on the 2008 Bonds from the gross income of the owners of the 2008 Bonds for federal income taxes. Norton Rose Fulbright US LLP is also serving as Disclosure Counsel to NCPA in connection with the remarketing of the 2008 Bonds. Certain legal matters will also be passed upon for NCPA by NCPA’s General Counsel, and for the Bank by Chapman and Cutler LLP.

Citigroup
Remarketing Agent

The date of this Remarketing Memorandum is _____, 2019.

MATURITY SCHEDULE

\$85,160,000 2008 Bonds due July 1, 2032—Price 100%, CUSIP Number 664845BE3[†]

[†] CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein are provided by CUSIP Global Services, managed by S&P Capital IQ on behalf of the American Bankers Association. CUSIP numbers have been assigned by an independent company not affiliated with NCPA or the Remarketing Agent and are included solely for the convenience of the owners of the 2008 Bonds. Neither NCPA nor the Remarketing Agent is responsible for the accuracy of this CUSIP data.

NORTHERN CALIFORNIA POWER AGENCY
651 Commerce Drive
Roseville, California 95678
Telephone: (916) 781-3636

NCPA Commissioners and Members

Roger Frith, Chair	Councilmember, City of Biggs	Teresa O’Neill, Vice Chair	Councilmember, City of Santa Clara
Gerald “Jerry” Serventi.....	Board Member, Public Utilities Board of the City of Alameda	[Vacant]	San Francisco Bay Area Rapid Transit
Paul Eckert.....	City of Gridley	David Hagele	Mayor, City of Healdsburg
Mark Chandler	Mayor, City of Lodi	Jenelle Osbourne.....	Mayor, City of Lompoc
Gregory Scharff	City of Palo Alto	Dave Roberti	Board President, Plumas-Sierra Rural Electric Cooperative
[Vacant]	Port of Oakland	Kristen Schreder	Councilmember, City of Redding
John Allard	Councilmember, City of Roseville	James Takehara.....	Utility Director, City of Shasta Lake
Bob Ellis	Board Member, Truckee Donner Public Utility District	Doug Crane	Councilmember, City of Ukiah

Management

General Manager	Randy S. Howard
General Counsel	Jane E. Luckhardt, Esq.
Assistant General Manager, Finance and Administrative Services; Chief Financial Officer	Monty Hanks
Assistant General Manager, Legislative & Regulatory	Jane Dunn Cirrincione
Assistant General Manager, Power Management	Tony Zimmer
Assistant General Manager, Generation Services.....	Ken Speer

Project Participants

Participant	Project Entitlement Percentage
Alameda.....	10.00%
Biggs.....	0.10
Gridley	1.06
Healdsburg.....	1.66
Lodi.....	10.37
Lompoc	2.30
Palo Alto	22.92
Roseville	12.00
Santa Clara.....	35.86
Ukiah	2.04
Plumas-Sierra Rural Electric Cooperative	1.69
	100.00%

Special Services

Trustee and Tender Agent
U.S. Bank National Association
New York, New York

Bond and Disclosure Counsel
Norton Rose Fulbright US LLP
Los Angeles, California

Municipal Advisor
PFM Financial Advisors LLC
Los Angeles, California

No dealer, broker, salesperson or any other person has been authorized by NCPA, the Project Participants or the Remarketing Agent to give any information or to make any representation, other than the information and representations contained herein, in connection with the remarketing of the 2008 Bonds and, if given or made, such information or representations must not be relied upon as having been authorized by any of the foregoing. This Remarketing Memorandum does not constitute an offer to sell or the solicitation of an offer to buy, nor will there be any sale of, the 2008 Bonds in any jurisdiction in which it is unlawful to make such offer, solicitation or sale. This Remarketing Memorandum is not to be construed as a contract with the purchasers of the 2008 Bonds.

Statements contained in this Remarketing Memorandum which include estimates, forecasts or matters of opinion, are intended solely as such and are not to be construed as representations of fact. The information relating to the Letter of Credit and the Bank, solely set forth under the captions "THE LETTER OF CREDIT AND REIMBURSEMENT AGREEMENT" (but excluding the information set forth thereunder under the subcaption "Alternate Credit Facility and Liquidity Facility") and "CERTAIN INFORMATION CONCERNING THE BANK" herein have been furnished by the Bank of America, N.A., and neither NCPA nor the Project Participants make any representations with respect thereto or assume any responsibility therefor. The other information set forth herein has been furnished by NCPA, the Project Participants or other sources which are believed to be reliable. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Remarketing Memorandum nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the matters described herein since the date hereof.

The Remarketing Agent has provided the following sentence for inclusion in this Remarketing Memorandum: The Remarketing Agent has reviewed the information in this Remarketing Memorandum in accordance with, and as part of, its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Remarketing Agent does not guarantee the accuracy or completeness of such information.

CAUTIONARY STATEMENTS REGARDING
FORWARD-LOOKING STATEMENTS IN
THIS REMARKETING MEMORANDUM

Certain statements included or incorporated by reference in this Remarketing Memorandum constitute "forward-looking statements." Such statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "budget" or other similar words. Such forward-looking statements include, but are not limited to, certain statements contained in the information under the captions "RATE REGULATION" and "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY (including particularly, but not limited to, under the sub-caption "PG&E Bankruptcy") in this Remarketing Memorandum and in the description of each of the Significant Share Project Participant's operations set forth in APPENDIX A hereto. Forward-looking statements in APPENDIX A and elsewhere in this Remarketing Memorandum are subject to risks and uncertainties, including particularly those relating to natural gas costs and availability, wholesale and retail electric energy and capacity prices, federal and State legislation and regulations, developments in the PG&E bankruptcy proceeding, competition and industry restructuring, and the economies of the service areas of the Project Participants.

The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. NCPA does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur.

NCPA maintains a website. However, the information presented therein is not part of this Remarketing Memorandum and should not be relied upon in making investment decisions with respect to the 2008 Bonds.

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REMARKETING MEMORANDUM
of
NORTHERN CALIFORNIA POWER AGENCY
Relating to its
\$85,160,000
Hydroelectric Project Number One Revenue Bonds
2008 Refunding Series A
(Variable Rate Demand Bonds)

INTRODUCTION

This Introduction is not a summary of this Remarketing Memorandum, and is qualified in its entirety by reference to the more complete and detailed information included and referred to elsewhere in this Remarketing Memorandum. The reoffering of the 2008 Bonds to potential investors is made only by means of the entire Remarketing Memorandum. Capitalized terms used in this Introduction and not otherwise defined herein will have the respective meanings assigned to them elsewhere in this Remarketing Memorandum. See “APPENDIX D – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Certain Definitions.”

General

This Remarketing Memorandum (which includes the cover page, the inside cover page, the table of contents and the appendices hereto) is furnished by the Northern California Power Agency (“NCPA”) to provide certain information in connection with the remarketing of NCPA’s outstanding \$85,160,000 Hydroelectric Project Number One Revenue Bonds, 2008 Refunding Series A (the “2008 Bonds”) upon the mandatory tender of such 2008 Bonds on [June 24, 2019] in connection with the delivery of a replacement Letter of Credit (as hereinafter defined) for such 2008 Bonds, as more fully described herein.

The 2008 Bonds were originally issued on April 2, 2008 pursuant to the provisions of Article 4 of the Joint Exercise of Powers Act, Chapter 5 of Division 7 of Title 1 of the Government Code of the State of California (the “Act”) and Articles 10 and 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code of the State of California and under and in accordance with an Indenture of Trust dated as of March 1, 1985, as amended and supplemented, including as supplemented by the Sixteenth Supplemental Indenture of Trust, dated as of April 1, 2008 (collectively, the “Indenture”), by and between NCPA and U.S. Bank National Association, as successor trustee (the “Trustee”), the Agreement for Construction, Operation and Financing of the North Fork Stanislaus River Hydroelectric Development Project, dated as of September 1, 1982, as amended (the “Third Phase Agreement”), by and among NCPA and the eleven NCPA Members which have entered into the Third Phase Agreement with NCPA (collectively, the “Project Participants”) relating to NCPA’s Hydroelectric Project Number One (the “Project”), and the Power Purchase Contract dated July 6, 1981, as amended and revised by the Revised Power Purchase Contract, dated as of March 1, 1985 (the “Power Purchase Contract”), by and between NCPA and Calaveras County Water District (“Calaveras”).

The 2008 Bonds were issued to provide funds, together with other available moneys, to refund certain then Outstanding Hydroelectric Project Number One Revenue Bonds of NCPA originally issued to refinance certain costs of the Project, and to pay costs of issuance of the 2008 Bonds and other costs related to the refunding. The 2008 Bonds and all Hydroelectric Project Number One Revenue Bonds Outstanding under the Indenture are referred to herein as the “Hydroelectric Project Bonds.”

NCPA

NCPA is a joint exercise of powers agency formed under the Joint Exercise of Power Act (Cal. Gov. Code §§ 6500 et seq.) (the “Act”) and an Amended and Restated Northern California Power Agency Joint Powers Agreement, as supplemented (the “NCPA Joint Powers Agreement”) now among the City of Alameda (“Alameda”), the City of Biggs (“Biggs”), the City of Gridley (“Gridley”), the City of Healdsburg (“Healdsburg”), the City of Lodi (“Lodi”), the City of Lompoc (“Lompoc”), the City of Palo Alto (“Palo Alto”), the City of Redding (“Redding”), the City of Roseville (“Roseville”), the City of Santa Clara (“Santa Clara”), the City of Shasta Lake (“Shasta Lake”), the City of Ukiah (“Ukiah”), the City of Oakland acting by and through its Board of Port Commissioners (“Port of Oakland”), the Truckee Donner Public Utility District (“Truckee Donner”), and the San Francisco Bay Area Rapid Transit District (“BART”) as members, and the Plumas-Sierra Rural Electric Cooperative (“Plumas-Sierra”), as an associate member (herein collectively referred to as the “Members” and individually as a “Member”). The Project Participants and their Project Entitlement Percentages are shown on page (a) hereof. The Significant Share Project Participants, representing in aggregate over 90% in Project Entitlement Percentages, are the cities of Alameda, Lodi, Palo Alto, Roseville and Santa Clara.

The Project

The Project consists of a 252.86 megawatt (“MW”) hydroelectric project (net capacity based on California Independent System Operator Masterfile for Collierville Powerhouse and Spicer Meadow Dam Powerhouse) and related facilities, described under the caption “THE HYDROELECTRIC PROJECT.” NCPA is entitled, under the Power Purchase Contract (i) to receive the electric output of the Project for 50 years from February 1982, with an option to purchase Project capacity and energy in excess of Calaveras’s requirements thereafter, subject to Federal Energy Regulatory Commission (“FERC”) approval, and (ii) to operate the generating facilities of the Project. In February 1990, the operating portions of the Project were declared substantially complete and commercially operable. The Project is primarily used to serve the Project Participants’ load requirements, and is secondarily used for load-following by NCPA, whereby the project output is used to balance the Project Participants’ load forecast deviations.

Third Phase Agreement

Under the Third Phase Agreement, NCPA has agreed to provide, and each Project Participant has agreed to take or cause to be taken, the Project Participant’s Project Entitlement Percentage of the capacity and energy of the Project. The Project Participants pay for such capacity and energy on a cost-of-service basis. Each Project Participant has agreed to make payments for such capacity and energy solely from the revenues of, and as an operating expense of, such Project Participant’s electric system. Such payments must be made regardless of whether or not the Project is operable, operating or retired and notwithstanding the suspension, interruption, interference, reduction or curtailment of Project output or the capacity and energy contracted for in whole or in part for any reason whatsoever. See “SECURITY AND SOURCES OF PAYMENT FOR THE 2008 BONDS – Third Phase Agreement.”

2008 Bonds are Multi-Modal Bonds

Under the Indenture, the 2008 Bonds are multi-modal bonds, and the term of the 2008 Bonds is divided into interest rate periods (each a “Rate Period”), as described herein. The 2008 Bonds currently bears interest in a Weekly Rate Period and will continue in a Weekly Rate Period until converted to another Rate Period as provided herein. Citigroup Global Markets Inc. currently serves as Remarketing Agent for the 2008 Bonds. U.S. Bank National Association serves as Tender Agent for the 2008 Bonds. See “DESCRIPTION OF THE 2008 BONDS.”

Pursuant to the Indenture, at the election of NCPA, the interest Rate Period for the 2008 Bonds may be converted from a Weekly Rate Period to a Daily Rate Period, a Short Term Rate Period, a Long Term Rate Period or an ARS Rate Period, as described herein. If the interest Rate Period is converted from a Weekly Rate Period to any other interest Rate Period, the 2008 Bonds will be subject to mandatory tender for purchase.

THIS REMARKETING MEMORANDUM PROVIDES INFORMATION AS OF ITS DATE CONCERNING THE 2008 BONDS WHILE BEARING INTEREST IN A WEEKLY INTEREST RATE PERIOD ONLY. THIS REMARKETING MEMORANDUM IS NOT INTENDED TO PROVIDE INFORMATION WITH RESPECT TO THE 2008 BONDS (INCLUDING THE TERMS OF SUCH 2008 BONDS THAT CHANGE BASED ON THE INTEREST RATE PERIOD FOR SUCH 2008 BONDS) AFTER CONVERSION FROM A WEEKLY RATE PERIOD TO ANOTHER INTEREST RATE PERIOD OR IF SUCH 2008 BONDS ARE NO LONGER SECURED BY THE LETTER OF CREDIT (AS HEREINAFTER DEFINED).

Replacement of the Letter of Credit

On [June 24, 2019], an irrevocable transferrable direct-pay letter of credit for the benefit of the 2008 Bonds (the “Letter of Credit”) to be issued by the Bank of America, N.A. (the “Bank”), is expected to replace the existing irrevocable direct-pay letter of credit originally issued on September 10, 2014, by the Bank of Montreal, acting through its Chicago Branch, for the 2008 Bonds. Payments of principal and redemption price of and interest on the 2008 Bonds will be supported by the Letter of Credit to be issued in favor of the Trustee for the benefit of the registered owners of the 2008 Bonds on the effective date of the Letter of Credit. The Trustee will be instructed to draw upon the Letter of Credit to pay such principal and redemption price of and interest on the 2008 Bonds. The Tender Agent may also draw funds under the Letter of Credit to pay the Tender Price (as hereinafter defined) of the 2008 Bonds tendered for payment and not remarketed. The Letter of Credit has a scheduled termination date of [June __, 2024], subject to earlier termination under conditions described in the Letter of Credit. The Letter of Credit may be extended or replaced by an alternate letter of credit or other facility or facilities providing credit support (a “Credit Facility”) to pay principal of and interest on the 2008 Bonds and liquidity support (a “Liquidity Facility”) to pay the Tender Price of the 2008 Bonds tendered for purchase (other than Bank Bonds, as defined herein, or 2008 Bonds held by or for the benefit of NCPA), as described herein.

NCPA and the Bank will enter into a Letter of Credit Reimbursement Agreement, dated as of June 1, 2019 (the “Reimbursement Agreement”), pursuant to which the Letter of Credit will be issued and NCPA will be obligated to reimburse the Bank for amounts drawn under the Letter of Credit subject to the terms and conditions therein. The Letter of Credit constitutes a “2008 Series A Credit Facility” and a “2008 Series A Liquidity Facility” under the Indenture.

See “THE LETTER OF CREDIT AND REIMBURSEMENT AGREEMENT” and “CERTAIN INFORMATION CONCERNING THE BANK.”

Security and Sources of Payment for the 2008 Bonds

The 2008 Bonds are special, limited obligations of NCPA. The 2008 Bonds are payable solely from, and secured solely by drawings under the Letter of Credit and a pledge and assignment of, the Trust Estate, consisting primarily of the NCPA Revenues, and the other funds pledged by NCPA under the Indenture as described under the caption “SECURITY AND SOURCES OF PAYMENT FOR THE 2008 BONDS.”

The 2008 Bonds are not debts, liabilities or obligations of the State of California, any public agency thereof (other than NCPA), any Member of NCPA or any Project Participant and neither

the faith and credit nor the taxing power of any of the foregoing (including NCPA) is pledged for the payment of the 2008 Bonds. NCPA has no taxing power.

No Funded 2008 Debt Service Reserve Account

Pursuant to the Indenture, a Series Debt Service Reserve Account is established in the Debt Service Fund for the 2008 Bonds, designated the “Northern California Power Agency Hydroelectric Project Number One Revenue Bonds, 2008 Refunding Series A Debt Service Reserve Account” (the “2008 Debt Service Reserve Account”). **However, the Series A Debt Service Reserve Requirement (the “2008 Debt Service Reserve Requirement”) shall be zero, and no amounts are required to be deposited and/or held therein until changed as provided under the Indenture.** See “SECURITY AND SOURCES OF PAYMENT FOR THE 2008 BONDS – No Funded 2008 Debt Service Reserve Account.”

Swap Agreement for the 2008 Bonds

In 2004, NCPA entered into an interest rate swap agreement (the “2004 Swap Agreement”) with Citigroup Financial Products Inc. (“CFPI”) in an initial notional amount of \$85.16 million in anticipation of refunding the Hydroelectric Project Bonds that were refunded by the 2008 Bonds. The 2004 Swap Agreement was entered into by NCPA for the purpose of converting the floating rate interest payments that NCPA is obligated to make with respect to the 2008 Bonds into substantially fixed rate payments. Under certain circumstances, the 2004 Swap Agreement is subject to termination and NCPA may be required to make a substantial termination payment to the counterparty thereunder. Payments due from NCPA under the 2004 Swap Agreement, including any amounts payable upon early termination thereof, are payable from amounts on deposit in the General Reserve Account on a basis that is junior and subordinate to the payment of the Hydroelectric Project Bonds. The obligations of NCPA to make regularly scheduled payments and certain termination payments to CFPI under the 2004 Swap Agreement are insured by National Public Finance Guarantee Corporation (formerly MBIA Insurance Corporation). See “OTHER OBLIGATIONS OF NCPA.”

No Continuing Disclosure

While continuing in the Weekly Mode, the 2008 Bonds are exempt from the continuing disclosure requirements set forth in Securities and Exchange Commission Rule 15c2-12 (the “Rule”) issued under the Securities Exchange Act of 1934, as amended.

Other Matters

The summaries of and references to all documents, statutes, reports and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary and reference is qualified in its entirety by reference to each document, statute, report or instrument. The capitalization of any word not conventionally capitalized or otherwise defined herein indicates that such word is defined in a particular agreement or other document and, as used herein, has the meaning given to it in such agreement or document. In preparing this Remarketing Memorandum, NCPA has relied upon certain information relating to the Project Participants furnished to NCPA by the Project Participants.

Attached to this Remarketing Memorandum is a summary of certain provisions of the Indenture. Copies of the Indenture and the Third Phase Agreement are available for inspection at the offices of NCPA in Roseville, California, and will be available upon request and payment of duplication costs from the Trustee.

OTHER OBLIGATIONS OF NCPA

Each NCPA project is separately financed. As of June 3, 2019, in addition to \$278.4 million of Hydroelectric Project Bonds Outstanding under the Indenture, NCPA had outstanding approximately \$29.6 million of Capital Facilities Revenue Bonds, \$24.5 million of Geothermal Project Number 3 Revenue Bonds and \$331.1 million of Lodi Energy Center Revenue Bonds. For further information on NCPA projects and related bond issues, see “OTHER NCPA PROJECTS.” Each Project Participant is also a direct or indirect participant in one or more of such other NCPA projects.

As described herein, NCPA and the Bank are entering into the Reimbursement Agreement pursuant to which the Letter of Credit for the 2008 Bonds will be issued. NCPA will be obligated under the Reimbursement Agreement to repay the Bank for amounts drawn under the Letter of Credit subject to the terms and conditions therein. The obligation of NCPA to repay any draws on the Letter of Credit is payable on a parity as to priority of payment and with respect to the lien on NCPA Revenues for the payment of the Hydroelectric Project Bonds. Tendered 2008 Bonds purchased with funds drawn under the Letter of Credit would constitute “Bank Bonds” until remarketed in accordance with the terms of the Indenture (which may include by conversion to another interest Rate Period) and the terms of the Reimbursement Agreement. Bank Bonds would bear interest at a fluctuating per annum interest rate equal to the greater of (i) the Prime Rate then in effect plus up to 2.00% (depending on the length of time for which such 2008 Bonds were Bank Bonds), (ii) the Federal Funds Rate plus up to 3.00% (depending on the length of time for which such 2008 Bonds were Bank Bonds), and (iii) up to 8.00% (depending on the length of time for which such 2008 Bonds were Bank Bonds). The principal of the Bank Bonds would generally be payable in six semi-annual installments, commencing on the earlier of the date which is 180 days following the date of the related drawing under the Letter of Credit or the Stated Expiration Date of the Letter of Credit, and ending on the third anniversary of such commencement date. While NCPA may attempt in such event to refinance the 2008 Bonds to avoid this additional debt burden, there can be no assurance that NCPA will have access to the debt markets on favorable terms. See “THE LETTER OF CREDIT AND THE REIMBURSEMENT AGREEMENT.”

As described herein, NCPA has entered into the 2004 Swap Agreement for the purpose of converting the floating rate interest payments that NCPA is obligated to make with respect to the 2008 Bonds into substantially fixed rate payments. In general, the terms of the 2004 Swap Agreement provide that, on a same-day net-payment basis determined by reference to a notional amount equal to the principal amount of the Outstanding 2008 Bonds (*i.e.*, \$85.16 million), NCPA will pay a fixed per annum interest rate of 3.819% on the notional amount. In return, CFPI will pay a variable rate of interest equal to the sum of 54% of one-month LIBOR plus 0.54% on a like notional amount. The agreement by CFPI to make payments under the 2004 Swap Agreement does not affect NCPA’s obligation to make payment of the 2008 Bonds. Under certain circumstances, the 2004 Swap Agreement is subject to termination and NCPA may be required to make a substantial termination payment to the counterparty thereunder. Early termination of an interest rate swap agreement could occur due to a default or the occurrence of a termination event, including a default under other specified swaps and indebtedness relating to the Project, or certain events of insolvency, or if a party may not legally perform its swap obligations, or if the credit rating of certain debt obligations of a party are downgraded below specified levels (or, in the case of NCPA, if the claims paying ability of the swap insurer has been downgraded below specified levels and the long-term ratings on the outstanding Hydroelectric Project Bonds is less than “Baa3” or “BBB-“ by Moody’s or S&P, respectively). Payments due from NCPA under the 2004 Swap Agreement, including any amounts payable upon early termination thereof, are payable from amounts on deposit in the General Reserve Account on a basis that is junior and subordinate to the payment of the Hydroelectric Project Bonds. The obligations of NCPA to make regularly scheduled payments and certain termination payments to CFPI under the 2004 Swap Agreement are insured by National Public Finance Guarantee Corporation (formerly MBIA Insurance Corporation).

See also Note E to NCPA’s audited financial statements for the fiscal years ended June 30, 2018 and 2017, which are attached to this Remarketing Memorandum as APPENDIX B.

DESCRIPTION OF THE 2008 BONDS

The following is a summary of certain provisions of the 2008 Bonds while in a Weekly Rate Period. Reference is made to the Indenture for a more detailed description of such provisions. The discussion herein is qualified by such reference. This Remarketing Memorandum is not intended to provide information with respect to the 2008 Bonds (including the terms of such 2008 Bonds which change based on the interest Rate Period for the 2008 Bonds) after Conversion from a Weekly Rate Period to another interest Rate Period or if such 2008 Bonds are no longer secured by a Letter of Credit.

General Bond Terms

Book-Entry Only System. The 2008 Bonds were issued as fully registered bonds, registered in the name of Cede & Co., as nominee for The Depository Trust Company, New York, New York (“DTC”). DTC acts as securities depository for the 2008 Bonds. Principal and Tender Price of, premium, if any, and interest on the 2008 Bonds are payable by the Trustee to DTC, which is obligated in turn to remit such principal and Tender Price of, premium, if any, and interest to its DTC Participants for subsequent disbursement to the Beneficial Owners (as defined in APPENDIX C) of the 2008 Bonds. See “APPENDIX C – BOOK-ENTRY ONLY SYSTEM.”

So long as Cede & Co. (or another nominee of DTC) is the registered owner of the 2008 Bonds, references herein to the Holders or registered owners of the 2008 Bonds will mean Cede & Co. (or such other nominee) as aforesaid, and will not mean the Beneficial Owners of the 2008 Bonds.

Authorized Denominations; Calculation and Payment of Interest. The 2008 Bonds currently bear interest at Weekly Rates in a Weekly Rate Period and will continue in a Weekly Rate Period until converted to another interest Rate Period, as described herein. During a Weekly Rate Period, the 2008 Bonds will be issued in Authorized Denominations of \$100,000 and any integral multiple of \$5,000 in excess of \$100,000. During a Weekly Rate Period, interest on the 2008 Bonds is payable on each January 1 and July 1. The first interest payment date following the remarketing of the 2008 Bonds as described herein will be July 1, 2019. During a Weekly Rate Period, interest on the 2008 Bonds shall be computed on the basis of a 365- or 366-day year, as appropriate, and the actual number of days elapsed.

Maximum Interest Rate. At no time will any 2008 Bonds (other than Bank Bonds, as defined below) bear interest at a rate in excess of the Maximum Bond Interest Rate, which is the lesser of 12% per annum or the maximum rate permitted by law.

Letter of Credit; Liquidity Provider Bonds. On [June 24], 2019, an irrevocable transferrable direct-pay Letter of Credit supporting the 2008 Bonds is expected to be issued by the Bank. The Trustee will be instructed to draw upon the Letter of Credit to pay the principal and redemption price of and interest on the 2008 Bonds. The Tender Agent may also draw funds under the Letter of Credit to pay the Tender Price (as hereinafter defined) of the 2008 Bonds tendered for payment and not remarketed. See “THE LETTER OF CREDIT AND REIMBURSEMENT AGREEMENT” and “CERTAIN INFORMATION CONCERNING THE BANK.”

While the Letter of Credit for the 2008 Bonds is in effect, the Bank is considered the Holder of 2008 Bonds for purposes of giving consents and directions to the Trustee under the Indenture.

There are a number of provisions in the Indenture relating to the terms of 2008 Bonds purchased by the Bank pursuant to a Letter of Credit (“Bank Bonds”) which are not described in this Remarketing Memorandum. All references to the terms of the 2008 Bonds in this Remarketing Memorandum describe only 2008 Bonds which are not owned by the Bank unless expressly indicated herein.

Interest Rates and Interest Rate Periods

Interest Rate Periods. The term of the 2008 Bonds shall be divided into consecutive interest Rate Periods selected by NCPA in the manner provided in the Indenture during which the 2008 Bonds will bear interest at Daily Rates, Weekly Rates, Short Term Rates, Auction Period Rates or a Long Term Rate. At any time, all 2008 Bonds will bear interest in the same interest Rate Period which, shall be a Daily Rate Period, a Weekly Rate Period, a Short Term Rate Period, a Long Term Rate Period or an ARS Rate Period.

The 2008 Bonds currently bear interest in a Weekly Rate Period. NCPA may elect that the 2008 Bonds be converted to another interest Rate Period, subject to the satisfaction of certain conditions specified in the Indenture, including, in most cases, the prior written consent of the Bank and delivery of a Favorable Opinion of Bond Counsel in connection with a Conversion.

THIS REMARKETING MEMORANDUM PROVIDES INFORMATION AS OF ITS DATE CONCERNING THE 2008 BONDS WHILE BEARING INTEREST IN A WEEKLY INTEREST RATE PERIOD ONLY. THIS REMARKETING MEMORANDUM IS NOT INTENDED TO PROVIDE INFORMATION WITH RESPECT TO THE 2008 BONDS (INCLUDING THE TERMS OF SUCH 2008 BONDS THAT CHANGE BASED ON THE INTEREST RATE PERIOD FOR SUCH 2008 BONDS) AFTER CONVERSION FROM A WEEKLY RATE PERIOD TO ANOTHER INTEREST RATE PERIOD OR IF SUCH 2008 BONDS ARE NO LONGER SECURED BY THE LETTER OF CREDIT.

Weekly Rate Period. During each Weekly Rate Period, the 2008 Bonds will bear interest at Weekly Rates. The Weekly Rate shall be determined by the Remarketing Agent by no later than 5:00 p.m., New York City time, on Tuesday of each week during a Weekly Rate Period or if such day shall not be a Business Day, then on the next succeeding Business Day. The first Weekly Rate for each Weekly Rate Period shall be determined on or prior to the first day of such Weekly Rate Period and shall apply to the period commencing on the first day of such Weekly Rate Period and ending on and including the next succeeding Tuesday (whether or not a Business Day). Thereafter, each Weekly Rate shall apply to the period commencing on and including Wednesday (whether or not a Business Day) and ending on and including the next succeeding Tuesday (whether or not a Business Day), unless such Weekly Rate Period shall end on a day other than Tuesday, in which event the last Weekly Rate for such Weekly Rate Period shall apply to the period commencing on and including the Wednesday (whether or not a Business Day) preceding the last day of such Weekly Rate Period and ending on and including the last day of such Weekly Rate Period.

The Weekly Rate shall be the rate of interest per annum determined by the Remarketing Agent to be the minimum interest rate which, if borne by the 2008 Bonds, would enable the Remarketing Agent to sell all of the 2008 Bonds on the effective date of such rate at a price (without regarding accrued interest) equal to the principal amount thereof.

If the Remarketing Agent fails to establish a Weekly Rate for the 2008 Bonds for any week, then the Weekly Rate for such 2008 Bonds during such week shall be the same as the Weekly Rate for such 2008 Bonds for the immediately preceding week, if the Weekly Rate for such 2008 Bonds for such preceding week was determined by the Remarketing Agent. In the event the Remarketing Agent did not determine the Weekly Rate for the immediately preceding week, or if the Weekly Rate determined by the Remarketing Agent shall be held to be invalid or unenforceable by a court of law, then the interest rate for the 2008 Bonds for such week shall be equal to 110% of the SIFMA Swap Index, or if such index is no longer available, 85% of the interest rate on 30-day high grade unsecured commercial paper notes sold through dealers by major corporations as reported in The Wall Street Journal on the day the Weekly Rate for the 2008 Bonds would otherwise be determined by the Remarketing Agent.

Conversion to an Alternate Interest Rate Period. NCPA may, with the prior written consent of the Bank, by written direction to the Trustee, with copies to the Tender Agent and the Remarketing Agent, elect to convert the 2008 Bonds from the Weekly Rate Period to an alternate interest Rate Period. Upon such election and satisfaction of certain conditions, all of the 2008 Bonds will be subject to the alternate interest Rate Period. The written direction of NCPA must specify (i) the proposed effective date of the Conversion to any alternate interest Rate Period and (ii) the Tender Date for the 2008 Bonds to be purchased, which shall be the proposed effective date of the Conversion to an alternate interest Rate Period. With respect to any Conversion to a Long Term Rate Period, the direction of NCPA shall specify the duration and last day of the Long Term Rate Period. With respect to any Conversion to an ARS Rate Period, such direction of NCPA shall also specify the Initial Period, initial Auction Period, the first Auction Date and the first Interest Payment Date after the Conversion. In addition, the direction of NCPA shall be accompanied by (i) a Favorable Opinion of Bond Counsel and (ii) a form of the notice to be mailed by the Trustee to the Holders of the 2008 Bonds to be converted, as provided in the Indenture. A change to any alternate interest Rate Period may not take place unless, among other conditions, the prior written consent of the Bank has been obtained and a Favorable Opinion of Bond Counsel is delivered on the effective date of the alternate interest Rate Period.

The Trustee is required to give notice (by registered or certified mail, or by telecopy confirmed by registered or certified mail) of Conversion of 2008 Bonds to any new interest Rate Period not less than 30 days prior to the proposed effective date of such new interest Rate Period. **While the 2008 Bonds are registered in the name of Cede & Co., such notice shall be given only to DTC, and not to any Beneficial Owner of the 2008 Bonds.** Such notice will state (i) that the interest Rate Period on the 2008 Bonds will be converted to a Daily Rate Period, a Long Term Rate Period, a Short Term Rate Period or an ARS Rate Period, unless NCPA rescinds its election to convert the interest Rate Period or any condition precedent to such Conversion has not been satisfied; (ii) the proposed Conversion Date of such alternate interest Rate Period; (iii) that the 2008 Bonds are subject to mandatory tender for purchase on such Conversion Date, whether or not the Conversion to such alternate interest Rate Period occurs; (iv) the applicable Tender Price; and (v) the procedures for such tender and purchase.

If any condition precedent to the Conversion of 2008 Bonds have not been satisfied, the 2008 Bonds shall continue to be subject to mandatory tender for purchase on the date which would have been the Conversion Date. In such event, the interest Rate Period for the 2008 Bonds shall not be converted and the 2008 Bonds shall continue to bear interest in the Weekly Rate Period commencing on the date which would have been the effective date of the Conversion.

Rescission of Election to Convert to Alternate Interest Rate Period. Notwithstanding anything in the Indenture to the contrary, in connection with any Conversion of the interest Rate Period for the 2008 Bonds, NCPA shall have the right to deliver to the Trustee on or prior to 10:00 a.m. on the Business Day preceding the proposed Conversion Date of any such Conversion, a notice to the effect that NCPA elects to rescind its election to make such Conversion. If NCPA rescinds its election to make such Conversion, then the 2008 Bonds shall continue to bear interest in a Weekly Rate Period, commencing on the date which would have been the effective date of the Conversion. In any event, if notice of a Conversion has been mailed to the Holders of the 2008 Bonds and NCPA rescinds its election to make such Conversion, then the 2008 Bonds shall continue to be subject to mandatory tender for purchase on the date which would have been the effective date of the Conversion.

Purchase of 2008 Bonds

Tenders of 2008 Bonds Are Subject to DTC Procedures. As long as the book-entry only system is in effect with respect to the 2008 Bonds, all tenders for purchase and deliveries of 2008 Bonds tendered for purchase or subject to mandatory tender under the provisions of the Indenture shall be made pursuant to DTC's procedures as in effect from time to time, and neither NCPA, the Bank, the Trustee, the Tender

Agent nor the Remarketing Agent shall have any responsibility for or liability with respect to the implementation of such procedures. For a description of the tender procedures through DTC, see “APPENDIX C – BOOK-ENTRY ONLY SYSTEM.”

Tender for Purchase Upon Election of Holder During Weekly Rate Period. During any Weekly Rate Period, the Holder of any 2008 Bond (other than a Liquidity Provider Bond) may elect to tender such 2008 Bond for purchase in an Authorized Denomination (provided that the amount of any such 2008 Bond not to be tendered for purchase shall also be in an Authorized Denomination) on any Business Day at a purchase price equal to the principal amount thereof, without premium, plus accrued interest to the applicable Tender Date (if the Tender Date is not an Interest Payment Date, in which event interest shall be paid to the Holder of such 2008 Bond as provided in the Indenture) (the “Tender Price”), upon delivery by the DTC Participant acting for such Holder to the Tender Agent, Trustee and Remarketing Agent of an irrevocable written notice which states the principal amount of the 2008 Bond tendered for purchase, the principal amount thereof to be purchased and the date on which such 2008 Bond is to be purchased, which date shall be a Business Day not prior to the seventh (7th) day next succeeding the date of the delivery of such notice to the Tender Agent. Any notice delivered to the Tender Agent after 4:00 p.m., New York City time, shall be deemed to have been received by the Tender Agent on the next succeeding Business Day.

The giving of notice by a Holder of a 2008 Bond to have its 2008 Bond purchased during a Weekly Rate Period shall constitute the irrevocable tender for purchase of such 2008 Bond regardless of whether that 2008 Bond is delivered to the Tender Agent for purchase on the relevant Tender Date.

Mandatory Tender for Purchase on First Day of Each Interest Rate Period. The 2008 Bonds shall be subject to mandatory tender for purchase at the applicable Tender Price on the first day of each interest Rate Period for the 2008 Bonds (or on the day which would have been the first day of an alternate interest Rate Period for such 2008 Bonds had one of the events specified in the Indenture not occurred which resulted in the interest Rate Period for such 2008 Bonds not being converted).

Mandatory Tender for Purchase Upon Substitution, Termination or Expiration of a Letter of Credit. If at any time the Trustee gives notice, in accordance with the Indenture, that the 2008 Bonds will, on the date specified in such notice, cease to be subject to purchase pursuant to the Liquidity Facility then in effect or cease to be paid from draws made under the Letter of Credit then in effect as a result of: (a) termination, substitution, or expiration of the term, as extended, of the Letter of Credit, including but not limited to termination at the option of NCPA in accordance with the terms of such Letter of Credit, or (b) the occurrence of a Mandatory Standby Tender, then, in the case of a termination or expiration of the term as extended, of the Letter of Credit without replacement by an alternate Credit Facility or Liquidity Facility, on the fifth (5th) Business Day preceding any such expiration or termination and on the date of substitution or replacement in any case where an alternate Credit Facility or Liquidity Facility has been delivered to the Trustee, and in the case of a Mandatory Standby Tender, on the fifth (5th) Business Day following receipt of notice of the Bank directing such Mandatory Standby Tender, the 2008 Bonds shall be mandatorily tendered for purchase or deemed mandatorily tendered for purchase at the Tender Price.

Notice of Mandatory Tender for Purchase. In the case of any mandatory tender for purchase of the 2008 Bonds, the Trustee is required by the Indenture to give notice to the Holders of the 2008 Bonds (i) not later than 30 days prior to the proposed effective date of the alternate interest Rate Period, (ii) on or before the 30th day preceding the substitution, termination or expiration of the Letter of Credit, or (iii) in the case of any Mandatory Standby Tender under the Letter of Credit, as soon as reasonably possible, but no later than the Business Day, following the receipt by the Trustee of notice of the Mandatory Standby Tender.

Such notice will state:

(i) in the case of a mandatory tender for purchase on the a Conversion Date, the type of Rate Period to commence on such mandatory Tender Date;

(ii) in the case of a mandatory tender for purchase due to the termination, replacement or expiration of the Letter of Credit, that the Letter of Credit will expire, terminate or be replaced and that the 2008 Bonds will no longer be payable from the Letter of Credit, as appropriate, then in effect and that any rating applicable to the 2008 Bonds may be reduced or withdrawn;

(iii) that the Tender Price of any 2008 Bond subject to mandatory tender for purchase will be payable only upon surrender of that 2008 Bond to the Tender Agent pursuant to the Indenture;

(iv) that, provided that moneys sufficient to effect such purchase will have been provided through the remarketing of such 2008 Bonds by the Remarketing Agent or through the Letter of Credit or funds provided by NCPA (at its discretion), all 2008 Bonds subject to mandatory tender for purchase will be purchased on the mandatory Tender Date; and

(v) that if any Holder of a 2008 Bond subject to mandatory tender for purchase does not surrender that 2008 Bond to the Tender Agent for purchase on the mandatory Tender Date, then that 2008 Bond will be deemed to be an undelivered 2008 Bond, that no interest will accrue on that 2008 Bond on and after the mandatory Tender Date and that the Holder will have no rights under the Indenture other than to receive payment of the Tender Price.

Effect of Election to Tender or Mandatory Tender for Purchase of 2008 Bonds. The Tender Agent shall determine timely and proper delivery of 2008 Bonds tendered for purchase and the proper endorsement of 2008 Bonds delivered. So long as the 2008 Bonds are held in book-entry only form, delivery of any such 2008 Bond in connection with any optional or mandatory tender for purchase shall be effected by the making of, or the irrevocable authorization to make, appropriate entries on the books of DTC or any DTC Participant to reflect the transfer of the beneficial ownership interest in such 2008 Bond to the account of the Tender Agent or to the account of a DTC Participant acting on behalf of the Tender Agent. If funds in the amount of the applicable Tender Price of a 2008 Bond tendered or deemed tendered for purchase in accordance with the Indenture are available for payment to the Holder of such 2008 Bond on the Tender Date, from and after the Tender Date, (i) such 2008 Bond shall be deemed to be purchased and shall no longer be deemed to be Outstanding under the Indenture, (ii) interest shall no longer accrue on such 2008 Bond; and (iii) funds in the amount of the Tender Price of such 2008 Bond will be held by the Tender Agent for the benefit of the Holder thereof, to be paid on delivery (and proper endorsement) of such 2008 Bond to the Tender Agent at its principal office for delivery of 2008 Bonds.

Sources of Funds for Payment of the Tender Price. Funds for the purchase of 2008 Bonds that have been tendered for purchase, whether at the option of the Holders or pursuant to the mandatory tender requirements described herein, will be provided from the following sources:

First, from the proceeds of the remarketing of such 2008 Bonds;

Second, from moneys received from draws on the Letter of Credit; and

Third, from money made available by NCPA pursuant to the Indenture in its sole discretion.

Limited Obligation of NCPA. NCPA is not obligated to purchase 2008 Bonds tendered or deemed tendered for purchase pursuant to the Indenture if remarketing proceeds and payments under the Letter of Credit received by the Tender Agent are insufficient to pay the Tender Price of such 2008 Bonds. The failure to pay the Tender Price of 2008 Bonds tendered or deemed tendered for purchase if such funds are insufficient is not an Event of Default under the Indenture.

Remarketing of 2008 Bonds. Upon a mandatory tender (other than a Mandatory Standby Tender) or notice of tender for purchase of 2008 Bonds, the Remarketing Agent will offer for sale and use its best efforts to sell such 2008 Bonds on the same date designated for purchase thereof and, if not remarketed on such date, thereafter until sold, at a price equal to par plus accrued interest in accordance with the Indenture. 2008 Bonds subject to a Mandatory Standby Tender will not be remarketed unless (1) the 2008 Bonds are converted to a Long Term Rate Period or an ARS Rate Period, or (2) an alternate Liquidity Facility is in full force and effect, or unless the Liquidity Facility which respect to which such Mandatory Standby Tender was declared has been reinstated.

Inadequate Funds for Tenders. If sufficient funds are not available for the purchase of all 2008 Bonds tendered or deemed tendered and required to be purchased on any Tender Date, all such 2008 Bonds will bear interest at the Maximum Bond Interest Rate until all such 2008 Bonds are purchased as required in accordance with the Indenture, and, if applicable, will be returned to their respective Owners. Notwithstanding any other provision of the Indenture, such failed purchase and return will not constitute an Event of Default under the Indenture.

Redemption of 2008 Bonds

Optional Redemption while in a Weekly Rate Period. While any Weekly Rate Period is in effect with respect to the 2008 Bonds, the 2008 Bonds are subject to redemption prior to their stated maturity, at the option of the NCPA, in whole or in part, in such amounts as may be specified by NCPA, on any date, at a redemption price equal to the principal amount of 2008 Bonds called for redemption, plus unpaid accrued interest to the date fixed for redemption, without premium.

Mandatory Sinking Fund Redemption. The 2008 Bonds are also subject to mandatory redemption prior to their stated maturity, in part, on the dates and in the amounts set forth below (subject to adjustment in the event of optional redemption or extraordinary redemption), at a redemption price equal to the principal amount of the 2008 Bonds to be redeemed, together with unpaid accrued interest thereon to the date fixed for redemption, without premium:

Year (July 1)	Principal Amount
2019	\$ 1,520,000
2020	2,165,000
2021	2,255,000
2022	2,360,000
2023	2,600,000
2024	3,540,000
2025	3,450,000
2026	3,585,000
2027	3,730,000
2028	3,890,000
2029	13,175,000
2030	13,725,000
2031	14,285,000
2032 [†]	14,880,000

[†] Final maturity.

Extraordinary Redemption. The 2008 Bonds are subject to redemption prior to their stated maturity, at the option of NCPA in whole or in part (in such amounts as may be specified by NCPA) on any date, from: (i) insurance or condemnation proceeds and (ii) from any source of money if all or substantially all of the Initial Facilities are damaged or destroyed, taken by any public entity in the exercise of its powers of eminent domain or disposed of or abandoned, at a redemption price equal to the principal amount thereof, plus unpaid accrued interest to the date fixed for redemption, without premium; provided that the option of NCPA to call the 2008 Bonds for redemption from insurance or condemnation proceeds shall expire 90 days following the receipt of such insurance or condemnation proceeds.

Selection of 2008 Bonds for Redemption. Whenever provision is made in the Indenture for the redemption of less than all of the 2008 Bonds, the Trustee shall select the 2008 Bonds to be redeemed from all 2008 Bonds subject to redemption and not previously called for redemption, in any manner which the Trustee in its sole discretion shall deem appropriate and fair, provided, however, that 2008 Bonds shall be redeemed in the following order of priority:

First: Any 2008 Bonds which are Liquidity Provider Bonds; and

Second: Any other 2008 Bonds.

Notice of Redemption. The Indenture requires the Trustee to give notice of the redemption of any 2008 Bonds by mailing a notice of redemption of such 2008 Bonds, postage prepaid, not less than 30 days before the redemption date, to the Holders of any 2008 Bonds or portions of 2008 Bonds which are to be redeemed, at their last address appearing upon the registry books. Among other things, such notice shall state that on the redemption date there shall become due and payable on each 2008 Bond to be redeemed the redemption price thereof, or the redemption price of the specified portions of the principal thereof in the case of 2008 Bonds to be redeemed in part only, together with unpaid accrued interest to the redemption date, and that on and after such date, interest thereon shall cease to accrue and be payable. Receipt of such notice shall not be a condition precedent to such redemption and failure so to receive such notice or any defect in such notice shall not affect the validity of the proceedings for the redemption of 2008 Bonds. **So long as the 2008 Bonds are in book-entry form, such notice of redemption by the Trustee to the Holders will be mailed only to DTC (or its nominee).**

Special Considerations Relating to the 2008 Bonds

Remarketing Agreement. NCPA has entered into a Remarketing Agreement for the 2008 Bonds, dated as of April 1, 2008 (the “Remarketing Agreement”), with Citigroup Global Markets Inc. as the Remarketing Agent (the “Remarketing Agent”). Under the Remarketing Agreement, the Remarketing Agent has agreed to use its best efforts to offer for sale all 2008 Bonds tendered in accordance with the provisions of the Indenture.

The Remarketing Agent is Paid by NCPA. The Remarketing Agent’s responsibilities include determining the interest rate from time to time and remarketing 2008 Bonds that are optionally or mandatorily tendered by the owners thereof (subject, in each case, to the terms of the Remarketing Agreement), all as further described in this Remarketing Memorandum. The Remarketing Agent is appointed by NCPA and is paid by NCPA for its services. As a result, the interests of the Remarketing Agent may differ from those of existing Holders and potential purchasers of 2008 Bonds.

The Remarketing Agent Routinely Purchases Bonds for its Own Account. The Remarketing Agent acts as remarketing agent for a variety of variable rate demand obligations and, in its sole discretion, routinely purchases such obligations for its own account. The Remarketing Agent is permitted, but not obligated, to purchase tendered 2008 Bonds for its own account and, in its sole discretion, routinely acquires such tendered 2008 Bonds in order to achieve a successful remarketing of the 2008 Bonds (*i.e.*, because there otherwise are not enough buyers to purchase the 2008 Bonds) or for other

reasons. However, the Remarketing Agent is not obligated to purchase 2008 Bonds, and may cease doing so at any time without notice. The Remarketing Agent may also make a market in the 2008 Bonds by routinely purchasing and selling 2008 Bonds other than in connection with an optional or mandatory tender and remarketing. Such purchases and sales may be at or below par. However, the Remarketing Agent is not required to make a market in the 2008 Bonds. The Remarketing Agent may also sell any 2008 Bonds it has purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others in order to reduce its exposure to the 2008 Bonds. The purchase of 2008 Bonds by the Remarketing Agent may create the appearance that there is greater third party demand for the 2008 Bonds in the market than is actually the case. The practices described above also may result in fewer 2008 Bonds being tendered in a remarketing.

Bonds May be Offered at Different Prices on Any Date Including an Interest Rate Determination Date. Pursuant to the Remarketing Agreement, the Remarketing Agent is required to determine the applicable rate of interest that, in its judgment, is the lowest rate that would permit the sale of the 2008 Bonds bearing interest at the applicable interest rate at par (without regard to accrued interest, if any) on and as of the applicable rate determination date. The interest rate will reflect, among other factors, the level of market demand for the 2008 Bonds (including whether the Remarketing Agent is willing to purchase 2008 Bonds for its own account). There may or may not be 2008 Bonds tendered and remarketed on a rate determination date, the Remarketing Agent may or may not be able to remarket any 2008 Bonds tendered for purchase on such date at par and the Remarketing Agent may sell 2008 Bonds at varying prices to different investors on such date or any other date. The Remarketing Agent is not obligated to advise purchasers in a remarketing if it does not have third party buyers for all of the 2008 Bonds at the remarketing price. In the event the Remarketing Agent owns any 2008 Bonds for its own account, it may, in its sole discretion in a secondary market transaction outside the tender process, offer such 2008 Bonds on any date, including the rate determination date, at a discount to par to some investors.

The Ability to Sell 2008 Bonds other than through Tender Process May Be Limited. The Remarketing Agent may buy and sell 2008 Bonds other than through the tender process. However, it is not obligated to do so and may cease doing so at any time without notice and may require Holders that wish to tender their 2008 Bonds to do so through the Tender Agent with appropriate notice. Thus, investors who purchase the 2008 Bonds, whether in a remarketing or otherwise, should not assume that they will be able to sell their 2008 Bonds other than by tendering the 2008 Bonds in accordance with the tender process.

Under Certain Circumstances, the Remarketing Agent May Be Removed, Resign or Cease Remarketing the 2008 Bonds, Without a Successor Being Named. Under certain circumstances the Remarketing Agent may be removed or have the ability to resign or cease its remarketing efforts. No removal shall take effect prior to the date that a successor remarketing agent has been appointed and has accepted such appointment. If the Remarketing Agent resigns without a successor having been named, the Trustee may assume such duties until a successor is appointed as described in the Indenture.

SECURITY AND SOURCES OF PAYMENT FOR THE 2008 BONDS

Letter of Credit

Payment of the principal or redemption price of, interest on, and (to the extent remarketing proceeds are insufficient therefor) the Tender Price of the 2008 Bonds will be made from proceeds of draws on the Letter of Credit. Proceeds from the draws under the Letter of Credit will be deposited into a special account and used solely for such purpose. See “THE LETTER OF CREDIT AND REIMBURSEMENT AGREEMENT.”

Pledge Effected by the Indenture

The 2008 Bonds are special, limited obligations of NCPA payable solely from, and secured solely by a pledge and assignment of, the following pursuant to the Indenture, which constitutes the Trust Estate: (a) subject only to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth therein, (i) the proceeds of the sale of the Hydroelectric Project Bonds, (ii) (a) all revenues, income, rents and receipts derived or to be derived by NCPA from or attributable to the Project or the Power Purchase Contract or to the payment of the costs of the Project received or to be received by NCPA under the Third Phase Agreement or the Power Purchase Contract or under any other contract for the sale by NCPA of the Project or any part thereof or any contractual arrangement with respect to the use of the Project or any portion thereof or the services or capacity thereof, (b) the proceeds of any insurance, including the proceeds of any self-insurance fund, covering business interruption loss relating to the Project, and (c) interest received or to be received on any moneys or securities (other than in the Construction Fund) held pursuant to the Indenture and required to be paid into the Revenue Fund established thereunder (“NCPA Revenues”), and (iii) all amounts on deposit in the Funds established by the Indenture, including the investments, if any, thereof to the extent held by the Trustee; and (b) all right, title and interest of NCPA in, to and under the Third Phase Agreement and the Power Purchase Contract. Payment of the principal of and interest on, and the Tender Price of the 2008 Bonds is additionally secured by the Letter of Credit.

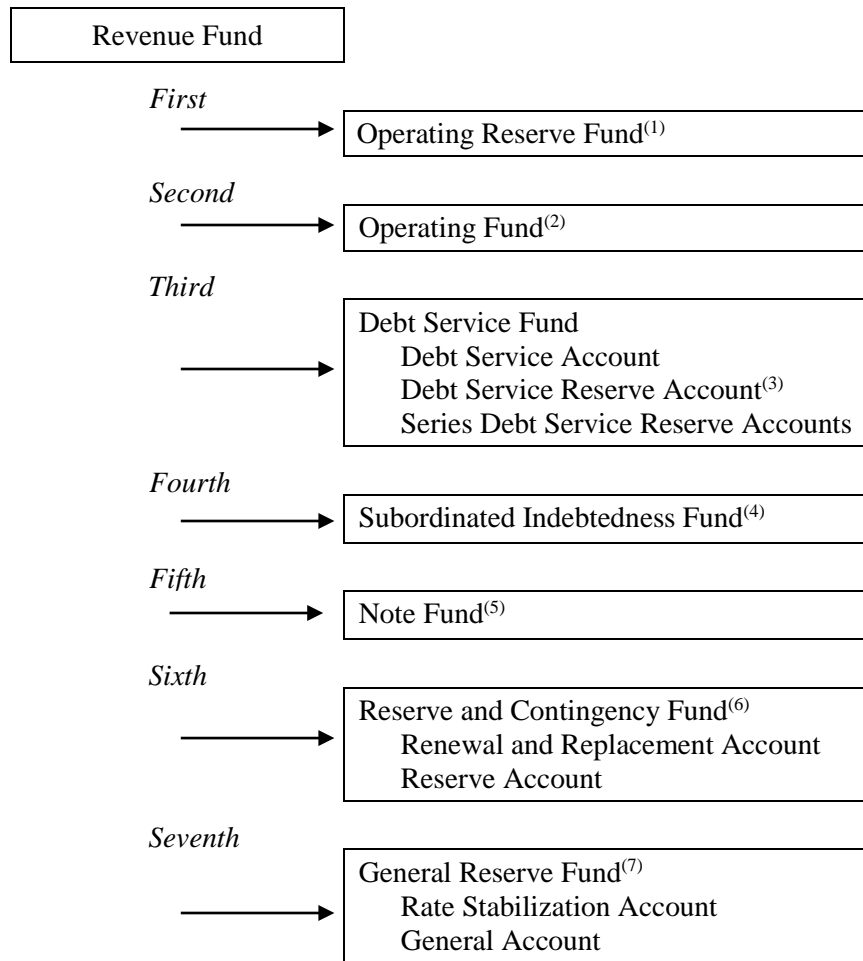
The 2008 Bonds and the interest thereon are payable solely from the funds provided therefor under the Indenture (including the Letter of Credit) and shall not constitute a charge against the general credit of NCPA. The 2008 Bonds are not secured by a legal or equitable pledge of, or lien or charge upon, any property of NCPA or any of its income or receipts except the Trust Estate pledged pursuant to the Indenture which is subject to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth therein. Neither the faith and credit nor the taxing power of the State of California or any public agency thereof or any Member of NCPA or any Project Participant is pledged to the payment of the principal of, or interest on, the 2008 Bonds. NCPA has no taxing power. Neither the payment of the principal of, or interest on, the 2008 Bonds constitutes a debt, liability or obligation of the State of California or any public agency thereof (other than NCPA) or any Member of NCPA or any Project Participant. The Commissioners, directors, officers and employees of NCPA shall not be individually liable on the 2008 Bonds or in respect of any undertakings by NCPA under the Indenture.

The 2008 Bonds are payable from and secured by the Trust Estate on a parity basis with all other Hydroelectric Project Bonds Outstanding under the Indenture. As of June 3, 2019, there was \$278.4 million aggregate principal amount of Hydroelectric Project Bonds Outstanding under the Indenture (including the 2008 Bonds).

Order of Application of NCPA Revenues

Pursuant to the Indenture, all NCPA Revenues received are to be deposited promptly in the Revenue Fund upon receipt thereof. Amounts in the Revenue Fund are to be paid monthly in the following order of priority for application therefrom as follows:

[Remainder of page intentionally left blank.]



- (1) To be maintained in such amount as recommended by a Consulting Engineer. The Consulting Engineer has recommended that such amount be set to \$0, provided that NCPA has established a common special reserve fund for the operating and maintenance expenses of the Project and the NCPA Geothermal Project in an amount not less than \$3,000,000. Such special reserve has been established.
- (2) To be applied for the payment of NCPA Operating Expenses.
- (3) The Debt Service Reserve Account is maintained in an amount equal to the Debt Service Reserve Requirement as defined in APPENDIX D. Amounts in the Debt Service Reserve Account are available to fund deficiencies in the Debt Service Account for Participating Bonds. The 2008 Bonds are Non-Participating Bonds and are not secured by amounts in the Debt Service Reserve Account. See “SECURITY AND SOURCES OF PAYMENT FOR THE 2008 BONDS – No Funded 2008 Debt Service Reserve Account.” NCPA’s Outstanding Hydroelectric Project Number One Revenue Bonds, 1992 Refunding Series A are the only Participating Bonds. All other Outstanding Hydroelectric Project Bonds (including the 2008 Bonds) are Non-Participating Bonds. The Indenture provides that Future Bonds will be Participating Bonds unless otherwise provided in the Supplemental Indenture authorizing such Future Bonds. Future Bonds may be supported by amounts in a Series Debt Service Reserve Account established for such Future Bonds or may be issued with no debt service reserve.
- (4) To be applied to the payment of Subordinated Indebtedness under the Indenture. There is currently no Subordinated Indebtedness Outstanding under the Indenture.
- (5) To be applied to the payment of Notes. There are currently no Notes Outstanding under the Indenture.
- (6) Amounts in the Renewal and Replacement Account (currently \$0) are to be applied to the costs of Capital Improvements. The Reserve Account is to be maintained in such amount as recommended by the Consulting Engineer. Amounts in the Reserve Account, if any, are to be applied to the costs of Capital Improvements not funded from the Renewal and Replacement Account, to the payment of extraordinary operating and maintenance costs of the Project and to contingencies. Amounts in the Reserve and Contingency Fund, if any (currently \$0) are available to fund deficiencies in Operating Fund or Debt Service Fund.
- (7) Amounts in the General Reserve are to be applied to make up deficiencies in the Debt Service Account, the Debt Service Reserve Account and the Reserve and Contingency Fund, and may be applied, upon a determination of NCPA, for other specified purposes, including any other lawful purpose of NCPA related to the Project.

See “APPENDIX D – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE” for further discussion of certain of the terms and provisions of the Indenture relating to the application of NCPA Revenues.

NCPA Rate Covenant

Pursuant to the Indenture, NCPA has covenanted, at all times, to establish and collect rates and charges with respect to the Project to provide NCPA Revenues at least sufficient in each Fiscal Year, together with other available funds, for the payment of all of the following: (i) NCPA Operating Expenses, (ii) Aggregate Debt Service, (iii) all other required deposits to any Funds under the Indenture, and (iv) all other charges or other amounts whatsoever payable out of NCPA Revenues during such Fiscal Year. See “APPENDIX D – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Rate Covenant.”

No Funded 2008 Debt Service Reserve Account

The 2008 Debt Service Reserve Requirement shall be zero until changed as provided under the Indenture. Consequently, no funds are currently on deposit in or required to be maintained in the 2008 Debt Service Reserve Account.

Pursuant to the Indenture, certain prior Series of Hydroelectric Project Bonds were secured by, and all future Series of Hydroelectric Project Bonds other than Hydroelectric Project Bonds authorized by a Supplemental Indenture that provides that such Hydroelectric Project Bonds are not “Participating Bonds” will be secured by, the Debt Service Reserve Account. The Indenture provides that a Supplemental Indenture authorizing a Series of Hydroelectric Project Bonds may provide that such Hydroelectric Project Bonds are not Participating Bonds (all such Hydroelectric Project Bonds being referred to as “Non-Participating Bonds”) and may be secured by a Series Debt Service Reserve Account or may be issued with no debt service reserve. The 2008 Bonds are Non-Participating Bonds. Amounts on deposit in any Series Debt Service Reserve Account for any Series of Non-Participating Bonds shall be used and withdrawn as provided in the Supplemental Indenture of Trust authorizing the issuance of such Non-Participating Bonds. Amounts on deposit in the Debt Service Reserve Account secure only Participating Bonds. Amounts on deposit in any Series Debt Service Reserve Account (other than the 2008 Series Debt Service Reserve Account in the event the Debt Service Reserve Requirement is hereafter changed from zero under the Indenture) do not secure in any manner the 2008 Bonds.

In the event that the 2008 Debt Service Reserve Requirement is changed to an amount greater than zero pursuant to the Indenture, in lieu of the required deposits and transfers of money to the 2008 Debt Service Reserve Account, NCPA may cause to be deposited to the 2008 Debt Service Reserve Account a Financial Guaranty or Financial Guaranties in an amount equal to the difference between the 2008 Debt Service Reserve Requirement and the funds, if any, then on deposit in the 2008 Debt Service Reserve Account or being deposited in the 2008 Debt Service Reserve Account concurrently with such Financial Guaranty or Guaranties.

See “APPENDIX D – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Application of Debt Service Reserve Account” for additional information regarding the 2008 Debt Service Reserve Account in the event such accounts are to be funded in the future.

Additional Hydroelectric Project Bonds

NCPA may issue Hydroelectric Project Bonds under and secured by the Indenture to refund bonds previously issued and Outstanding under and secured by the Indenture and may, although it does not currently expect to, issue Additional Bonds to finance Capital Improvements to the Project. For

further information, see “APPENDIX D – SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Additional Bonds” and “– Refunding Bonds.”

Third Phase Agreement

Project Participants’ Take-or-Pay Obligation. The Third Phase Agreement authorizes NCPA to fix charges equal to the amounts anticipated to be needed to provide capacity and energy from the Project, including but not limited to debt service, operation, maintenance and replacement costs, a reasonable reserve for contingencies, and all other costs of the Project. The Third Phase Agreement further provides that, to the extent that the funds provided thereunder and described in the preceding sentence are not sufficient for such purposes, the Project Participants will pay an amount equal to their Project Entitlement Percentage of debt service on bonds, notes and other evidences of indebtedness (including an applicable percentage of the 2008 Bonds), reserves therefor, and all other payments required to be made under the Indenture and the Power Purchase Contract, whether or not the Project is completed, operable, operating or retired and notwithstanding the suspension, interruption, interference, reduction or curtailment of Project output or the power and energy contracted for in whole or in part for any reason whatsoever.

Operating Expense. Each Project Participant will make payments under the Third Phase Agreement solely from the Revenues of, and as an operating expense of, its electric system. Nothing in the Third Phase Agreement prohibits any Project Participant from using any other funds and revenues to satisfy the provisions thereof, nor does it require any Project Participant to do so.

Project Participants’ Rate Covenant. Each Project Participant agrees to establish and collect fees and charges for electric capacity and energy furnished through facilities of its electric system sufficient to provide Revenues adequate to meet its obligations under the Third Phase Agreement and to pay any and all other amounts payable from or constituting a charge and lien upon any or all such Revenues.

Increase in Non-defaulting Project Participants’ Original Project Entitlement Percentage. Upon the failure of any Project Participant to make any payment, which failure constitutes a default under the Third Phase Agreement, and except as sales and transfers are made pursuant thereto, the Third Phase Agreement provides that the Project Entitlement Percentage of each non-defaulting Project Participant shall be automatically increased for the remaining term of the Third Phase Agreement, pro rata with those of the other non-defaulting Project Participants thereunder; provided, however, that the sum of such increases for any non-defaulting Project Participant shall not exceed, without written consent of such non-defaulting Project Participant, an accumulated maximum of 25% of the non-defaulting Project Participant’s original Project Entitlement Percentage.

Transfer, Sale or Assignment. Each Project Participant has the right to make transfers, sales and/or assignments of its interests in Project capacity and energy and rights thereto; provided that no such transfer, sale or assignment shall adversely affect the tax-exempt status (if applicable) of interest on Hydroelectric Project Bonds issued under the Indenture. No such transfer, sale or assignment shall relieve the Project Participant of its obligations under the Third Phase Agreement. No Project Participant shall transfer its electric system unless the Project Participant provides assurance that its obligations under the Third Phase Agreement will be promptly and adequately met, including providing sufficient moneys for such purpose if no other adequate assurance is available.

Limitations on Remedies

The rights of the owners of the 2008 Bonds are subject to the limitations on legal remedies against cities and other public agencies in the State. Additionally, enforceability of the rights and remedies of the owners of the 2008 Bonds, and the obligations incurred by the NCPA and the Project Participants, may become subject to the following: the Federal Bankruptcy Code and applicable bankruptcy, insolvency, reorganization, moratorium, or similar laws relating to or affecting the

enforcement of creditor's rights generally, now or hereafter in effect; equity principles which may limit the specific enforcement under State law of certain remedies; the exercise by the United States of America of the powers delegated to it by the Constitution; and the reasonable and necessary exercise, in certain exceptional situations, of the police powers inherent in the sovereignty of the State and its governmental bodies in the interest of serving a significant and legitimate public purpose. Bankruptcy proceedings, or the exercise of powers by the federal or State government, if initiated, could subject the owners of the 2008 Bonds to judicial discretion and interpretation of their rights in bankruptcy or otherwise, and consequently may entail risks of delay, limitation, or modification of their rights.

THE LETTER OF CREDIT AND THE REIMBURSEMENT AGREEMENT

The Letter of Credit and the Reimbursement Agreement

The following is a summary of certain provisions of the Letter of Credit and the Reimbursement Agreement. The Letter of Credit will be substantially in the form attached as APPENDIX G.

The following summary does not purport to be a full and complete statement of the provisions of the Letter of Credit or the Reimbursement Agreement, each of which should be read in full for a complete understanding of all the terms and provisions thereof. Capitalized terms used in this summary and not defined in this summary or elsewhere in this Remarketing Memorandum will have the meanings assigned to such terms in the Letter of Credit or the Reimbursement Agreement. In the event of any conflict between the Reimbursement Agreement or the Letter of Credit and this Remarketing Memorandum with respect to a meaning assigned to a capitalized term used in this summary and not defined in this summary, the meaning set forth in the Reimbursement Agreement or the Letter of Credit shall control.

The Letter of Credit. Payment of principal of and interest on the 2008 Bonds which are Eligible Bonds is supported by the Letter of Credit to be issued by the Bank pursuant to the Reimbursement Agreement. Pursuant to the terms of the Letter of Credit, the Trustee and Tender Agent, as applicable, under the Indenture, are entitled to draw thereunder to pay the principal of, the redemption price and interest on the Bonds which are Eligible Bonds and to pay the purchase price of the Bonds which are Eligible Bonds tendered but unsuccessfully remarketed.

The Letter of Credit irrevocably authorizes draws in accordance with its terms in an aggregate amount not exceeding \$[90,815,558] (as reduced and reinstated from time to time in accordance with the provisions of such Letter of Credit, the "Stated Amount"), consisting of (i) the amount of \$85,160,000, which may be drawn upon with respect to payment of the unpaid principal amount of, or portion of the purchase price corresponding to the principal of, the 2008 Bonds and (ii) the amount of \$[5,655,558], which may be drawn upon with respect to the payment of up to 202 days' accrued interest on the 2008 Bonds, in each case assuming a maximum interest rate of 12% per annum based on a year of 365 days.

The Letter of Credit will terminate on the Termination Date. As used herein, "Termination Date" means the earliest to occur of the Bank's close of business on: (i) [June __], 2024 (as extended from time to time, the "Stated Expiration Date"); (ii) the earlier of (A) the date which is five (5) days following the date on which all of the 2008 Bonds bear interest at a rate other than the Weekly Rate, as such date is specified in a certificate delivered by the Trustee to the Bank (the "Conversion Date") and (B) the date on which the Bank honors a drawing under the Letter of Credit on or after the Conversion Date; (iii) the date of receipt by the Bank from the Trustee of a certificate certifying that either (X) no 2008 Bonds remain Outstanding within the meaning of the Indenture, (Y) all drawings required under the Indenture and available under the Letter of Credit have been made and honored, or (Z) an Alternate Credit 2008 Series A Credit Facility or an Alternate 2008 Series A Liquidity Facility (as defined in the Indenture) has been issued to replace the Letter of Credit pursuant to the Indenture; (iv) the date of receipt from the Trustee of a certificate in the form set forth as Annex B hereto, (iv) the date on which an Acceleration

Drawing (as defined in the Letter of Credit) or a Stated Maturity Drawing (as defined in the Letter of Credit) is honored by the Bank; or (v) the date which is six (6) Business Days (or if such day is not a Business Day, on the next succeeding Business Day) after the Trustee has received a written notice as described in the Letter of Credit specifying the occurrence of an Event of Default under the Reimbursement Agreement from the Bank, and directing the Trustee to cause the mandatory tender of the 2008 Bonds.

***Reimbursement Agreement.** Set forth below is a summary of the events of default and remedies sections of the Reimbursement Agreement. This summary does not purport to be complete or to cover all relevant provisions of the Reimbursement Agreement. Reference is made to the Reimbursement Agreement for the details of the provisions thereof.*

Events of Default. The occurrence of any of the following events (including the expiration of any specified time) shall constitute an “Event of Default” under the Reimbursement Agreement unless waived by the Bank in writing:

(a) Failure of NCPA to pay when due any amount owed under the Reimbursement Agreement, under the Fee Letter or under any of the other Related Documents or the principal of or the interest on the Bonds or any Parity Debt; *provided, however,* that with respect to any amounts owed to the Bank pursuant to the Fee Letter, such failure shall not constitute an Event of Default unless such failure continues for two (2) Business Days following the date such amount became due and payable.

(b) Failure of NCPA to observe certain covenants set forth in the Reimbursement Agreement.

(c) Failure of NCPA to observe or perform any other term, covenant or agreement of (or incorporated by reference in) the Reimbursement Agreement (other than as specified in (a) or (b) above or (i) below) and the continuance of such default for thirty (30) days after the earlier of (x) the date on which notice thereof has been given to NCPA by the Bank or (y) the date on which any officer of NCPA obtained actual knowledge thereof.

(d) Any representation or warranty made by NCPA in the Reimbursement Agreement (or incorporated by reference in the Reimbursement Agreement) shall prove to have been untrue in any material respect when made.

(e) Any “event of default” under any Related Document (as defined respectively therein) shall have occurred.

(f) Default by NCPA in the payment of any amount due in respect of any Parity Debt (including, without limitation, any regularly scheduled payments on any Interest Rate Protection Agreement which constitute Parity Debt), as and when the same shall become due, or default under any mortgage, agreement or other instrument under or pursuant to which such Parity Debt is incurred or issued, and continuance of such default beyond the period of grace, if any, allowed with respect thereto, or the occurrence of any act or omission by NCPA under any such mortgage, agreement or other instrument which results in such Parity Debt becoming, or being capable of becoming, immediately due and payable (or, with respect to any Interest Rate Protection Agreement, which results in such Interest Rate Protection Agreement being terminated early or being capable of being terminated early).

(g) The entry or filing of any judgment, writ or warrant of attachment or of any similar process in an amount in excess of \$5,000,000 against NCPA relating to the Trust Estate or against the Project and failure of NCPA to vacate, bond, stay, appeal (if such appeal acts to stay the enforcement of such judgment, writ or warrant of attachment), or contest in good faith such

judgment, writ, warrant of attachment or other process for a period of 90 days or failure to pay or satisfy such judgment within 90 days.

(h) The occurrence of an Event of Insolvency with respect to NCPA.

(i) The rating assigned to the 2008 Bonds or any Parity Debt (without regard to third party credit enhancement) by Moody's, Fitch or S&P, in each case to the extent then providing a rating at the request of NCPA, shall be withdrawn, suspended or falls to or below "Baa3" by Moody's, "BBB-" by Fitch or "BBB-" by S&P.

(j) (i) any material provision of the Reimbursement Agreement, the Fee Letter, the Act or any of the Related Documents (other than a Remarketing Agreement that is terminated in accordance with terms thereof) or any of the Governing Documents ceases to be valid and binding on NCPA for any reason or the Reimbursement Agreement, the Fee Letter, the Act or any of the other Related Documents or any of the Governing Documents is declared null and void, or the validity or enforceability thereof is contested by NCPA or any officer of NCPA or by the Governmental Authority having jurisdiction or NCPA denies it has any or further liability under the Reimbursement Agreement, the Fee Letter, the Act or any of the other Related Documents or any of the Governing Documents, or such document is cancelled or terminated without the prior written consent of the Bank, or NCPA shall seek an adjudication that the Reimbursement Agreement, any other Related Document to which NCPA is a party, or any of the Governing Documents or any provision of the Indenture relating to the security for the Bonds or the Obligations, NCPA's ability to pay the Obligations or perform its obligations under the Reimbursement Agreement or the rights and remedies of the Bank, is not valid and binding on NCPA; or (ii) any pledge or security interest created by the Indenture or the Reimbursement Agreement to secure any amount due under any Bonds, the Bank Bonds, the Reimbursement Agreement or the Fee Letter shall fail to be fully enforceable or fail to have the priority required thereunder.

(k) Any actual seizure, vesting or intervention, by or under a Governmental Authority by which NCPA's management is displaced or its authority or control of its business relating to the Project is curtailed.

(l) Attachment or restraint of any funds or other property relating to the Trust Estate or the Project which may be in, or come into, the possession or control of the Trustee or the Bank or of any third party acting on the Bank's behalf, for the account or benefit of NCPA, or, except for limitations on remedies available against public agencies such as NCPA in the State, the issuance of any order of any court or other legal process against the same.

(m) An event has occurred and is continuing which has or is having a Material Adverse Effect.

(n) The powers of NCPA shall be limited in any way or the Indenture shall be modified or amended in any way without the prior written consent of the Bank, in either case, which prevents NCPA from fixing, charging or collecting rates and charges for the use and services of the Project in any amount sufficient to pay its debts as they become due.

(o) NCPA shall (i) default on the payment of the principal of or interest on any Debt (other than Parity Debt) including, without limitation, any regularly scheduled payments on Interest Rate Protection Agreements, aggregating in excess of \$10,000,000, beyond the period of grace, if any, provided in the instrument or agreement under which such Debt (other than Parity Debt) was created or incurred; or (ii) default in the observance or performance of any agreement or condition relating to any Debt (other than Parity Debt) aggregating in excess of \$10,000,000, or contained in any instrument or agreement evidencing, securing or relating thereto, or any other

default, event of default or similar event shall occur or condition exist, the effect of which default, event of default or similar event or condition is to permit (determined without regard to whether any notice is required) any such Debt to become immediately due and payable in full as the result of the acceleration, mandatory redemption or mandatory tender of such Debt.

Rights and Remedies Upon the Occurrence of an Event of Default. (a) Upon the occurrence and continuation of an Event of Default, the Bank, in its sole discretion, (i) may, by notice to NCPA, the Tender Agent and the Trustee, declare the obligations of NCPA under the Reimbursement Agreement (other than amounts owed on Bank Bonds) to be immediately due and payable, and the same shall thereupon become immediately due and payable (*provided* that, the obligations of NCPA under the Reimbursement Agreement shall be and become automatically and immediately due and payable without such notice upon the occurrence of an Event of Default described in paragraph (h) under the subcaption “Events of Default” above), without demand, presentment, protest or further notice of any kind, all of which are expressly waived by NCPA under the Reimbursement Agreement, (ii) may deliver to the Trustee and the Tender Agent written notice as described in the Letter of Credit that an Event of Default has been declared under the Reimbursement Agreement and that the Letter of Credit will terminate six (6) Business Days after receipt of such notice together with a written request that the Trustee call the Bonds for mandatory tender for purchase, (iii) may deliver to the Trustee and the Tender Agent written notices as described in the Letter of Credit that the applicable Interest Drawing shall not be reinstated following such Interest Drawing, (iv) may cure any default, event of default or event of nonperformance under the Reimbursement Agreement or under any of the Related Documents (in which event NCPA shall reimburse the Bank therefor pursuant to the Reimbursement Agreement), (v) may exercise its banker’s lien, or right of set-off with respect to the Project, (vi) may deliver written notice to the Trustee directing that all Bank Bonds be redeemed immediately pursuant to the Supplemental Indenture on the Business Day immediately succeeding the date on which the Trustee shall have received such notice, (vii) may proceed to protect its right by suit in equity, action at law or other appropriate proceedings for specific performance of any covenant or agreement of NCPA contained in the Reimbursement Agreement or (viii) may exercise any other rights or remedies available under any Related Document, any other agreement or at law or in equity. The rights and remedies of the Bank specified in the Reimbursement Agreement are for the sole and exclusive benefit, use and protection of the Bank, and the Bank is entitled, but shall have no duty or obligation to NCPA, the Trustee, the Tender Agent, the Bondholders or otherwise, (1) to exercise or to refrain from exercising any right or remedy reserved to the Bank under the Reimbursement Agreement, or (2) to cause the Trustee or any other party to exercise or to refrain from exercising any right or remedy available to it under any of the Related Documents.

(b) From and after the occurrence of an Event of Default, all amounts owing to the Bank under the Reimbursement Agreement and amounts owing on any Bank Bonds shall bear interest at the Default Rate.

If any Event of Default shall occur, then and in every such case the Bank shall be entitled to proceed to protect and enforce its rights by such appropriate judicial proceeding as it may deem most effectual to protect and enforce any such right, either by suit, in equity, or by action at law, whether for the specific performance of any covenant or agreement contained in the Reimbursement Agreement, in aid of the exercise of any power granted in the Reimbursement Agreement, or to enforce any other legal or equitable right vested in the Bank by the Reimbursement Agreement, the Bank Bonds, the Related Documents or by law. The provisions of the Reimbursement Agreement shall be a contract with the Bank and the duties of NCPA shall be enforceable, subject to judicial discretion and the availability of equitable remedies, by the Bank by mandamus or other appropriate suit, action, or proceeding in any court of competent jurisdiction.

Alternate Credit Facility and Liquidity Facility

At any time, NCPA may obtain an alternate Credit Facility and Liquidity Facility (which may be the same instrument) to replace the Letter of Credit then in effect for the 2008 Bonds. The 2008 Bonds are subject to mandatory tender for purchase in connection with such any such substitution or replacement. See “DESCRIPTION OF THE 2008 BONDS – Purchase of 2008 Bonds – Mandatory Tender for Purchase Upon Substitution, Termination or Expiration of a Letter of Credit.”

CERTAIN INFORMATION CONCERNING BANK OF AMERICA, N.A.

The information above contained under this caption “CERTAIN INFORMATION CONCERNING THE BANK” relates to and has been obtained from the Bank. The delivery of this Remarketing Memorandum shall not create any implication that there has been no change in the affairs of the Bank since the date such information was provided by the Bank, or that the information contained or referred to under this caption is correct as of any time subsequent to the date it was provided by the Bank.

Bank of America, N.A. (the “Bank”) is a national banking association organized under the laws of the United States, with its principal executive offices located in Charlotte, North Carolina. The Bank is a wholly-owned indirect subsidiary of Bank of America Corporation (the “Corporation”) and is engaged in a general consumer banking, commercial banking and trust business, offering a wide range of commercial, corporate, international, financial market, retail and fiduciary banking services. As of December 31, 2018, the Bank had consolidated assets of \$1.783 trillion, consolidated deposits of \$1.457 trillion and stockholder’s equity of \$207.73 billion based on regulatory accounting principles.

The Corporation is a bank holding company and a financial holding company, with its principal executive offices located in Charlotte, North Carolina. Additional information regarding the Corporation is set forth in its Annual Report on Form 10-K for the fiscal year ended December 31, 2018, together with its subsequent periodic and current reports filed with the Securities and Exchange Commission (the “SEC”).

The SEC maintains a website at www.sec.gov which contains the filings that the Corporation files with the SEC such as reports, proxy statements and other documentation. The reports, proxy statements and other information the Corporation files with the SEC are also available at its website, www.bankofamerica.com.

The information concerning the Corporation and the Bank is furnished solely to provide limited introductory information and does not purport to be comprehensive. Such information is qualified in its entirety by the detailed information appearing in the referenced documents and financial statements referenced therein.

The Bank will provide copies of the most recent Bank of America Corporation Annual Report on Form 10-K, any subsequent reports on Form 10-Q, and any required reports on Form 8-K (in each case, as filed with the SEC pursuant to the Securities Exchange Act of 1934, as amended), and the publicly available portions of the most recent quarterly Call Report of the Bank delivered to the Comptroller of the Currency, without charge, to each person to whom this document is delivered, on the written request of such person. Written requests should be directed to:

Bank of America Corporation
Office of the Corporate Secretary/Shareholder Relations
Hearst Tower, 214 North Tryon Street
NC1-027-18-05
Charlotte, NC 28255

PAYMENTS OF PRINCIPAL AND INTEREST ON THE 2008 BONDS WILL BE MADE FROM DRAWINGS UNDER THE LETTER OF CREDIT. PAYMENTS OF THE TENDER PRICE OF THE 2008 BONDS WILL BE MADE FROM DRAWINGS UNDER THE LETTER OF CREDIT IF REMARKETING PROCEEDS ARE NOT AVAILABLE. ALTHOUGH THE LETTER OF CREDIT IS A BINDING OBLIGATION OF THE BANK, THE 2008 BONDS ARE NOT DEPOSITS OR OBLIGATIONS OF THE CORPORATION OR ANY OF ITS AFFILIATED BANKS AND ARE NOT GUARANTEED BY ANY OF THESE ENTITIES. THE 2008 BONDS ARE NOT INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION OR ANY OTHER GOVERNMENTAL AGENCY AND ARE SUBJECT TO CERTAIN INVESTMENT RISKS, INCLUDING POSSIBLE LOSS OF THE PRINCIPAL AMOUNT INVESTED.

The delivery of this information shall not create any implication that there has been no change in the affairs of the Corporation or the Bank since the date of the most recent filings referenced herein, or that the information contained or referred to under this caption "CERTAIN INFORMATION CONCERNING BANK OF AMERICA, N.A." is correct as of any time subsequent to the referenced date.

THE REMARKETING AGENT

Citigroup Global Markets Inc. ("Citi") has been appointed to serve as the Remarketing Agent for the 2008 Bonds pursuant to the Indenture and the Remarketing Agreement. Under the terms of the Indenture, the Remarketing Agent will exercise its best efforts to sell the 2008 Bonds (including Bank Bonds) issued thereunder on the same date designated for purchase thereof in accordance with the Indenture and, if not remarketed on such date, thereafter until sold, at a price equal to par plus accrued interest, with such interest component of the sales price being determined by the Remarketing Agent, with consent of the Tender Agent, in order to best facilitate remarketing.

OTHER INVESTMENT CONSIDERATIONS

The following information should be considered by prospective investors in evaluating the 2008 Bonds. However, the following does not purport to be an exclusive listing of risks and other considerations that may be relevant to investing in the 2008 Bonds, and the order in which the following information is presented is not intended to reflect the relative importance of any such risks and considerations.

Expiration of the Letter of Credit

The scheduled termination date of the Letter of Credit is [June __,] 2024, subject to extension or earlier termination in certain circumstances as described therein. If the Letter of Credit is not extended or another Credit Facility and Liquidity Facility is not obtained by NCPA, the 2008 Bonds will be subject to mandatory tender for purchase. There can be no assurance that NCPA will be able to obtain an extension of the Letter of Credit or another Credit Facility and Liquidity Facility. The Bank is under no obligation to extend the Letter of Credit beyond the scheduled termination date thereof or to honor any drawing under the Letter of Credit not made in strict conformity with the terms thereof.

Bank's Obligations Unsecured

The ability of the Bank to honor draws upon the Letter of Credit Bonds is based solely upon the Bank's general credit and is not collateralized or otherwise guaranteed by the United States of America or any agency or instrumentality thereof. No provision has been made for replacement of or substitution for the Letter of Credit in the event of any deterioration in the financial condition of the Bank. Neither NCPA nor the Bank assumes any liability to any purchaser of the 2008 Bonds as a result of any deterioration of

the financial condition of the Bank. Upon any insolvency of the Bank, any claim by the Trustee against the Bank would be subject to bank receivership proceedings.

General Factors Affecting the Bank

The Bank is subject to regulation and supervision by various regulatory bodies. New regulations could impose restrictions upon the Bank which would restrict its ability to respond to competitive pressures. Various legislative or regulatory changes could dramatically impact the banking industry as a whole and the Bank specifically. The banking industry is highly competitive in many of the markets in which the Bank operates. Such competition directly impacts the financial performance of the Bank. Any significant increase in such competition could adversely impact the Bank.

Short-Term Ratings Based Solely on Bank Ratings

The short-term ratings on the 2008 Bonds are based upon the Bank's ratings and assume the issuance of the Letter of Credit by the Bank. See "RATINGS." It is possible that the Bank's current ratings could be downgraded; lower ratings could affect the liquidity or market price of the 2008 Bonds.

Performance by Trustee

Performance by the Bank of its obligations under the Letter of Credit is subject to the satisfaction of specific conditions by the Trustee as set forth in the Letter of Credit. Holders of the 2008 Bonds are therefore dependent upon the Trustee acting to satisfy such conditions before they will receive the benefit of the Letter of Credit. In addition, the question of whether the Trustee has properly satisfied such conditions is a question of fact which, if disputed, could delay or defeat the Trustee's rights of enforcement of the Letter of Credit.

NORTHERN CALIFORNIA POWER AGENCY

Background

NCPA is a joint exercise of powers agency formed under the Act and the NCPA Joint Powers Agreement now among Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Oakland (acting by and through its Board of Port Commissioners), Palo Alto, Redding, Roseville, Santa Clara, Shasta Lake, Ukiah, Truckee Donner, and BART as members, and Plumas-Sierra, as an associate member (herein collectively referred to as the "Members" and individually as a "Member").

Under the terms of the NCPA Joint Powers Agreement entered into by all Members, NCPA possesses the general powers to acquire, purchase, generate, transmit, distribute and sell electrical capacity and energy. Specific powers include the power to enter into contracts, acquire and construct electric generating facilities, set rates, issue revenue bonds and notes and acquire property by eminent domain.

The Facilities Agreement, originally executed by the NCPA Members in 1993, and superseded by the Amended and Restated Facilities Agreement, dated as of October 1, 2014 (the "Facilities Agreement"), provides for the development of all projects undertaken by NCPA in three separate phases: (i) the initial phase of general investigation funded by NCPA's general fund; (ii) the second phase whereby Members of NCPA electing to participate in the project execute a project agreement to provide for the cost of development of the project (now referred to as an "NCPA Project"); and (iii) the third phase during which all remaining aspects, including financing, construction and operation of the NCPA Project are undertaken. Pursuant to the Facilities Agreement and NCPA's other governing member services agreements, NCPA's administrative, general and occupancy costs and expenses, including costs

and expenses of the employees of NCPA (including salaries, wages and retirement benefits), are paid by NCPA Members based on an agreed upon cost allocation methodology.

Members of NCPA have no financial or other responsibility or liability associated with the acquisition, construction, maintenance, operation or financing of any NCPA project pursuant to the NCPA Joint Powers Agreement. Members become obligated for payments with respect to a NCPA project only as participants with respect to such project as set forth in an agreement with NCPA separate from the NCPA Joint Powers Agreement.

NCPA has supplied many services to its Members in the past and expects to continue to do so in the future. NCPA has been instrumental in litigating and negotiating with Pacific Gas and Electric Company (“PG&E”), the California Independent System Operator (the “CAISO”) and the Western Area Power Administration of the federal government (“Western”) to keep wholesale power and transmission and other ancillary services rates at levels which have resulted in substantial savings when compared to rates sought by each of those suppliers. It is anticipated that NCPA will continue to litigate and/or negotiate on behalf of its Members to maintain rates at levels which will result in continued advantage to its Members.

NCPA’s audited financial statements for the fiscal years ended June 30, 2018 and 2017 are attached as APPENDIX B.

Organization and Management

NCPA’s governing body (the “Commission”) is composed of one representative from each Member, each such representative being designated a Commissioner. The Commission is given the general management of the affairs, property and business of NCPA and is vested with all powers of NCPA. Under the NCPA Joint Powers Agreement, associate Members do not have a voting seat on the Commission, except as may be provided in a project agreement.

The management of NCPA is responsible for various areas of administration and planning of NCPA’s operations and affairs. The overall management is under the direction of NCPA’s General Manager, who serves at the discretion of the Commission. NCPA is organized into four separate divisions: (i) generation services, (ii) power management, (iii) legislative and regulatory, and (iv) administrative services.

Set forth below is a brief biography of each of NCPA’s senior managers.

RANDY S. HOWARD, General Manager, was appointed General Manager of NCPA in January 2015. Prior to accepting the position at NCPA, Mr. Howard was the Senior Assistant General Manager of the Power System at Los Angeles Department of Water and Power (“LADWP”). Mr. Howard has held previous LADWP positions as Executive Director of Customer Services, Director of Power System Planning and Development, and the Chief Compliance Officer in the Power System Executive Office. Mr. Howard is currently leading NCPA forward with several major strategic initiatives to address member issues and opportunities. Mr. Howard presents frequently before governance bodies, including the NCPA Board, and local, State and federal agencies on issues of importance to utilities. Mr. Howard has held many previous engineering and customer service management positions at LADWP. Mr. Howard has an undergraduate degree in Electrical Engineering from California State University, Sacramento and a master’s degree in Business Administration from Pepperdine University.

JANE E. LUCKHARDT, Esq., General Counsel, joined NCPA on May 1, 2017. Ms. Luckhardt received her Juris Doctorate from Stanford Law School, and her Bachelor of Science degree in Construction Management from California Polytechnic State University, San Luis Obispo, California. Prior to joining NCPA, Ms. Luckhardt was a partner at the boutique energy law firm of Day Carter

Murphy LLP and previously at Downey Brand, LLP, where she served in several leadership roles including Assistant to the Managing Partner, Executive Committee Member and Practice Group Leader for the Energy, Land Use and Mining Practice Group. Ms. Luckhardt also serves as the Vice President of the Power Association of Northern California, an energy trade group located in San Francisco, California. Ms. Luckhardt writes and speaks on issues facing the energy industry for energy trade groups and at legal conferences.

MONTY HANKS, Assistant General Manager, Finance/Administrative Services, Chief Financial Officer received his master's degree in Business Administration and a Bachelor of Science degree in Business Administration (Finance concentration) from California State University, Sacramento. Mr. Hanks has over 20 years of financial experience, including experience working with an electric, water, wastewater and solid waste utilities. Before joining NCPA in February 2017, Mr. Hanks was employed by the City of Roseville for 15 years serving in the role of Finance Director. At NCPA, Mr. Hanks oversees the Administrative Services division which includes finance, accounting, power settlements, information technology, human services, risk management and facilities management.

JANE DUNN CIRRINCIONE, Assistant General Manager, Legislative and Regulatory, received a master's degree in Public Administration from the University of Southern California, and a Bachelor of Science degree in Political Science from the University of Santa Clara in Santa Clara, California and the London School of Economics. Ms. Cirrincione has over 30 years of experience in the energy and environmental policy arena. Prior to joining NCPA, she was a Senior Government Relations Representative for the American Public Power Association ("APPA") in Washington, D.C. APPA is the national trade association representing the country's over 2,000 public power systems. Before joining APPA, she was the Director of Legislative Programs for the National Hydropower Association, representing all sections of the U.S. hydroelectric industry. She also spent several years on Capitol Hill as a Legislative Assistant for Congressman Don Edwards working on environmental and wildlife issues impacting the San Francisco Bay. Before moving to Washington, D.C., she worked for the U.S. Fish and Wildlife Service at the Sacramento National Wildlife Refuge. Ms. Cirrincione was the 2006 recipient of the Robert E. Roundtree Rising Star Award recognizing future leaders of public power systems.

TONY ZIMMER, Assistant General Manager, Power Management, has worked for NCPA for 18 years. Mr. Zimmer received a master's degree in Business Administration, and a Bachelor of Science degree in Finance from the California State University, Sacramento. Mr. Zimmer's experience includes contract development and negotiation, policy and procedure development, resource development and integration, settlements, CAISO market design and advocacy, and data analysis and system design. Mr. Zimmer's primary responsibilities include managing and directing Power Management activities at NCPA, development and authorization of regulatory filings made on behalf of NCPA Members and customers, direction of contract development, maintenance and revision activities required to support NCPA Member/customer interconnection and portfolio management needs, and management of staff assigned to functional areas such as Western advocacy, internal system design and integration, and policy and regulatory requirements.

KEN SPEER, Assistant General Manager, Generation Services, has over 35 years of experience in the generation resource management field, having also managed significant generation facilities for the City of Santa Clara (Silicon Valley Power) and PG&E. Mr. Speer also served as the Director of Capital Investment for Duke Energy North America, where he oversaw the capital investment program for the company's California-based assets. Mr. Speer has a Bachelor of Science degree in Mechanical and Nuclear Engineering from the University of California, Berkeley, and is a Registered Mechanical Engineer.

NCPA Power Pool

NCPA operates a power pool that includes the following Members: Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Plumas Sierra, the Port of Oakland and Ukiah (each, an “NCPA Pool Member”). The ten NCPA Pool Members’ service areas are interconnected to the CAISO-controlled grid. NCPA operates a central dispatch facility (the “Central Dispatch Center”) at NCPA’s headquarters. The Central Dispatch Center balances loads and resources pursuant to the Third Amended and Restated NCPA Metered Subsystem Aggregation Agreement (the “MSSA”), as such may be amended from time to time, with the CAISO (as described below) for the ten NCPA Pool Members, and Santa Clara. The Central Dispatch Center separately coordinates with Roseville to schedule Roseville’s entitlement to the Project output across the CAISO-controlled grid as requested by Roseville. The Central Dispatch Center also monitors and controls load and voltage levels of the Project, and enters into buy and sell transactions with other utilities throughout the western United States and Canada and regulates various hydroelectric facilities in coordination with the CAISO to maintain a safe and reliable interconnected system.

NCPA operates according to the terms and conditions of the CAISO tariff and the MSSA, the original form of which was approved by FERC in 2002 and as has been amended and restated as needed from time to time to conform to applicable market rules established by the CAISO and FERC. The MSSA identifies operational terms and conditions that vary from the CAISO tariff, largely allowing NCPA Members to continue to operate their respective systems as vertically integrated utilities by generally self-providing for resources and services otherwise procured through the CAISO’s markets. In conjunction with the execution of the MSSA, NCPA and PG&E are parties to an Interconnection Agreement (the “NCPA-PG&E Interconnection Agreement”) that provides for the terms and conditions for connecting NCPA resources and member loads to the CAISO-controlled grid (or PG&E wholesale transmission system), where such CAISO-controlled grid facilities are owned by PG&E and transferred to CAISO operational control through a Transmission Control Agreement between PG&E and the CAISO.

Santa Clara has separate agreements for the services provided under the MSSA and NCPA-PG&E Interconnection Agreement. See “APPENDIX A–SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS – CITY OF SANTA CLARA.”

Wholesale Power Trading and Other Activities

NCPA trades in the Western wholesale electricity markets to maximize the value of its transmission and generation assets and to minimize its cost of power supply for its Members. NCPA has engaged in wholesale market transactions since 1984. See also “LITIGATION – California Energy Market Dysfunction, Refund Dispute and Related Litigation” for certain information regarding past disruptions and related disputes arising in such markets following the partial deregulation of the electricity markets pursuant to AB 1890 enacted in 1996 and subsequent developments.

In addition to the wholesale energy market services NCPA supplies to its Members, NCPA also provides a variety of wholesale energy market services, including wholesale power trading, to certain non-Member customers. Currently, NCPA provides various scheduling, operating, and portfolio management services to Merced Irrigation District and Placer County Water Agency, as well as to three community choice aggregators (“CCAs”): Pioneer Community Energy, East Bay Community Energy, and San Jose Clean Energy. Such services are provided on a fee-for-service basis. NCPA has made an effort to identify and mitigate any potential counterparty risks in its service agreements with the non-Member entities to which it provides wholesale energy market services. NCPA only carries liability to the extent of NCPA’s insurance coverage. In addition, NCPA requires these customers to deposit an amount equal to the highest three months of estimated CAISO invoices into a security account held by NCPA.

Investment of NCPA Funds

All funds of NCPA (except bond proceeds which are invested pursuant to the indenture under which such bonds are issued) are invested in accordance with NCPA's investment policy and guidelines (the "Investment Policy") as authorized by Sections 53600 et seq. of the Government Code of the State of California. The Investment Policy and monthly activity reports are reviewed by NCPA's Finance Committee and approved by the NCPA Commission.

The following securities, if and to the extent the same are at the time legal and in compliance with the applicable bond covenants and agreements for investment of NCPA's funds, are authorized investments under the Investment Policy: (i) securities of the U.S. Government, or its agencies, (ii) certificates of deposit (or time deposits) placed with commercial banks and/or savings and loan companies, (iii) negotiable certificates of deposit, (iv) bankers acceptances, (v) Local Agency Investment Fund (State Pool) demand deposits, (vi) repurchase agreements, (vii) passbook savings account demand deposits, (viii) municipal bonds, (ix) commercial paper, (x) medium term corporate notes, and (xi) California Asset Management Program (CAMP).

The Investment Policy provides the following guidelines, among others. All rated securities must be rated by a nationally recognized statistical rating organization (NRSRO) as "A" or its equivalent or better. All certificates of deposit must mature within one year. All collateralized certificates of deposit must mature within one year. Certificates of deposit with a face value in excess of \$100,000 will be collateralized by Treasury Department securities or first mortgage loans. The Treasury bills or notes must be at least 110% of the face value of the certificate of deposit collateralized in excess of the first \$100,000. The value of first mortgages must be at least 150% of the face value of the certificate of deposit balance secured in excess of the first \$100,000. The portfolio will be diversified with holdings from at least several of the major eligible market sectors. Except for obligations issued or guaranteed by the U.S. Government, federal agencies or government-sponsored corporations and the Local Agency Investment Fund, no more than 10% of an NCPA construction project or of the NCPA operating funds portfolio will be invested in the securities of any one issuer. Unless otherwise restricted, all holdings will be of sufficient size and held in issues which are actively traded to facilitate transactions at a minimum cost and accurate market valuation. Buying and selling securities before settlement or the use of reverse repurchase agreements for speculative purposes is not authorized. A reverse repurchase agreement may be used only in infrequent circumstances and only to prevent a material loss that would otherwise result from the sale of an investment for liquidity purposes. Any reverse repurchase agreements must be specifically reported to the Commission along with the reasons therefor on a timely basis.

The Investment Policy may be changed at any time at the discretion of the Commission subject to the State law provisions relating to authorized investments. Any exception to the Investment Policy must be formally approved by the Commission. There can be no assurance, therefore, that the State law and/or the Investment Policy will not be amended in the future to allow for investments which are currently not permitted under such State law or the Investment Policy, or that the objectives of NCPA with respect to investments will not change.

THE HYDROELECTRIC PROJECT

The Project consists of (a) three diversion dams, (b) the 246.86-MW Collierville Powerhouse, (c) the Spicer Meadow Dam with a 6.0-MW powerhouse, and (d) associated tunnels located essentially on the North Fork Stanislaus River in Alpine, Tuolumne and Calaveras Counties, California, together with required transmission and related facilities.

The Project, with the exception of certain transmission facilities, is owned by Calaveras and is licensed by FERC, pursuant to a 50-year License (Project No. 2409) issued in 1982 to Calaveras.

Pursuant to the Power Purchase Contract, NCPA (i) is entitled to the electric output, including capacity, of the Project until February 2032, (ii) managed the construction of the Project, and (iii) operates the generating and recreational facilities of the Project. Under a separate FERC-issued license with an expiration date coterminous with the Project No. 2409 license (Project No. 11197), NCPA holds the license and owns the 230 kV Collierville-Bellota and the 21 kV Spicer Meadows-Cabbage Patch transmission lines for Project No. 2409. NCPA also has a separate FERC license for Project No. 11563 (Upper Utica Project), which consists of three storage reservoirs that mainly feed the New Spicer Meadow Reservoir. This license expires in 2033. Northern California Power Agency, 104 F.E.R.C. ¶ 62,163 (2003). After the present FERC License for Project No. 2409 expires in the year 2032, NCPA has the option to continue to purchase Project capacity and energy during a subsequent license renewal period. It is currently estimated that the price will be significantly less than the comparable alternatives at that time. The purchase option includes all capacity and energy which is surplus to Calaveras’ needs for power within the boundaries of Calaveras County.

As with any hydroelectric generation project, the operation of the Project is determined by consideration of its storage capacity, hydrology conditions, and available stream flows and requirements. The Project has a 105-year record (1913 to 2018) of stream flows. Based upon the record, the Project’s average production is estimated to be 512 GWh annually. The Project is optimized together with NCPA’s other resources as determined by NCPA, to economically meet the load requirements of the respective Project Participants. The load-following characteristics of the Project gives NCPA a great degree of flexibility in meeting the hourly and daily variations which occur in the Project Participants’ loads. The net Project generation for the previous ten fiscal years is as follows:

Fiscal Year Ended June 30	Total Net Generation (GWh)
2009	377
2010	533
2011	852
2012	463
2013	268
2014	197
2015	164
2016	397
2017	945
2018	487

NCPA financed the Project through the issuance of Hydroelectric Project Number One Revenue Bonds, of which approximately \$278.4 million aggregate principal amount was Outstanding as of June 3, 2019. See “Indebtedness” for each of the Significant Share Project Participants in “APPENDIX A–SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS” for a discussion of the obligations of each of the Significant Share Project Participants with respect to the Project.

NCPA has sold the energy and capacity of the Project to the Project Participants pursuant to a “take-or-pay” power sales contract, which require payments to be made whether or not the project is completed or operable. Each purchaser is responsible under the power sales contract for paying its entitlement share in the Project of all of NCPA’s costs of the Project, including debt service on the aforementioned bonds as well as a “step-up” of up to 25% in the event of the unremedied default of another Project Participant.

Biggs and Gridley have transferred their entitlement shares of the Project output to Santa Clara. Each Project Participant remains obligated for all payments due from such Project Participant under the

Third Phase Agreement, in the event moneys received from transferees pursuant to such arrangements are insufficient to satisfy all payments. Redding, Truckee Donner, Port of Oakland, Shasta Lake and BART, which are Members of NCPA, are not Project Participants, and have no financial or other responsibility or liability associated with the acquisition, construction, maintenance, operation or financing of the Project.

NCPA has estimated the average cost per kWh of power generated from the Project to be approximately \$0.11 cents/kWh in Fiscal Year 2018-19 (based on the current water year conditions). The average cost per kWh of power generated from the Project over the prior five fiscal years is shown in the following table:

Fiscal Year	Average Cost of Power (cents/kWh)
2013-14	\$0.26
2014-15	0.33
2015-16	0.13
2016-17	0.06
2017-18	0.12

THE PROJECT PARTICIPANTS

General

The Project Participants and their Project Entitlement Percentages are shown on page (a) of this Remarketing Memorandum.

The governing body of each Project Participant has approved the Third Phase Agreement. The California Public Utilities Code authorizes the municipal Project Participants to “acquire...any public utility,” including the supply of light and power. In furtherance of such powers, a municipal corporation “may acquire...rights of every nature...when necessary to supply the municipality, or its inhabitants or any portion thereof, with the service desired.”

Members of NCPA have no financial or other responsibility or liability associated with the acquisition, construction, maintenance, operation or financing of a particular project other than as project participants with respect to such project as set forth in the related third phase agreement.

Descriptions of the Significant Share Project Participants

The five Project Participants with the largest Project Entitlement Percentages are Alameda (10.00%), Lodi (10.37%), Palo Alto (22.92%), Roseville (12.00%) and Santa Clara (35.86%), which, in the aggregate, comprise over 90% of the Project. None of the remaining Project Participants has a Project Entitlement Percentage in excess of 3%. Alameda, Lodi, Palo Alto, Roseville, and Santa Clara are sometimes referred to herein as the “Significant Share Project Participants.” Brief descriptions of the Significant Share Project Participants, their service areas, existing power supply resources, customers, energy sales and revenues and expenses are set forth in “APPENDIX A–SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS.”

Electric Systems

Each Project Participant owns and operates an electric system for distribution of electric power and energy together with the general plant necessary to conduct its business. The electric systems of some of the Project Participants are among the oldest electric utilities in operation in California and some

predate the existence of PG&E. The electric systems were founded during the period from 1887 to 1937. The Project Participants are all experienced in operating electric distribution systems.

All of the Project Participants provide, through NCPA projects, for a portion of their own power needs. In addition, Alameda, Healdsburg, Lodi, Lompoc, Roseville and Ukiah obtain a portion of their power needs from Western. Biggs, Gridley, Palo Alto and Plumas-Sierra are also wholesale customers of Western and obtain a larger portion of their power needs from that source. Roseville also derives a portion of its power from its own generating facilities. Santa Clara receives part of its power requirements from Western, part from other power agencies, the power markets and its own generating projects. NCPA also purchases power from the market for certain of its Members (the Project Participants, exclusive of Santa Clara and Roseville) for periods of up to 30 days and for periods of up to five years (under separate project agreements) for Biggs, Gridley, Healdsburg, Lodi, Lompoc and Ukiah. Delivery of all such power is made over the CAISO-controlled grid, the Balancing Area of Northern California (“BANC”), Western transmission facilities, the California-Oregon Transmission Project (“COTP”) or combinations of those transmission facilities and balancing areas.

Service Areas

The municipal Project Participants provide retail electric service within their service areas pursuant to the authority of the Constitution of the State of California, Article XI, Section 9. Under California law, the municipal Project Participants have authority to acquire, construct, establish, enlarge, improve, maintain, own and operate electric distribution systems. Plumas-Sierra provides electric service pursuant to its Articles and Bylaws.

The retail customers of the municipal Project Participants are located within their respective city boundaries and environs. Plumas-Sierra serves rural areas in Plumas, Lassen and Sierra Counties in California and in Washoe Township in Washoe County, Nevada.

OTHER NCPA PROJECTS

Set forth below is a brief description of the NCPA resources in addition to the Project. Each such resource is financed under a separate agreement with the Members participating in such resource. No Member not a party to such agreement has any obligation to make payments in connection with such resources.

Participating Members occasionally make short-term and long-term assignments of entitlement rights to NCPA resources. Such assignment would not impact the underlying project participant obligations contained in the applicable agreement relating to such NCPA resource and each project participant remains obligated for all payments due from such project participant in the event moneys received from transferees pursuant to such arrangements are insufficient to satisfy all payments.

Lodi Energy Center Project

NCPA owns and operates a natural gas-fired, combined-cycle power generation plant located in the City of Lodi, San Joaquin County, California (the “Lodi Energy Center” or “LEC”). The electric generation components (the “Power Island”) of the Lodi Energy Center consists of the following components: (1) one natural gas-fired Siemens STGS-5000F combustion turbine-generator (CTG), with an evaporative cooling system and dry low-NOx combustors to control air emissions; (2) one 3-pressure heat recovery steam generator (HRSG), (3) a selective catalytic reduction (SCR) and carbon monoxide (“CO”) catalyst to further control NOx and CO emissions, respectively; (4) one Siemens SST-900RH condensing steam turbine generator (“STG”); (5) one natural gas-fired auxiliary boiler; (6) one 7-cell draft evaporative cooling tower; and (7) associated support equipment. The Lodi Energy Center was placed into commercial operation on November 27, 2012.

LEC is currently registered with a Pmax of 302 MW (increased from 280 MW in 2018). (The Pmax is a measure of the maximum normal capability of a generating unit that is utilized by the CAISO in determining the amount of capacity that can be counted toward meeting resource adequacy requirements.) NCPA intends to conduct further testing of the LEC facility in 2019 to increase the Pmax further as a result of transmission reconductoring completed by PG&E in 2018. LEC net generation for the last five fiscal years has been as follows:

Fiscal Year Ended June 30	LEC Net Generation (GWhs)
2017-18	1,075
2016-17	300
2015-16	1,077
2014-15	1,668
2013-14 ⁽¹⁾	1,191

⁽¹⁾ First full year of operation.

The increased generation in the fiscal year ended June 30, 2015 reflects the then ongoing dry weather conditions. During 2015, California was experiencing one of the most significant droughts in California recorded hydrologic history. During drought conditions, natural gas plants generally operate at higher output levels to make up for the loss of hydroelectric generation. In the fiscal year ended June 30, 2016, California returned to normal rainfall amounts and the natural gas generation decreased accordingly. The reduced generation in the fiscal year ended June 30, 2017 was directly attributable to the increase in PG&E gas transportation costs. NCPA negotiated a special rate for gas transmission for LEC which went into effect during Fiscal Year 2017-18. PG&E's 2019 gas transmission rate case that will set rates for the period 2019 to 2021 is currently ongoing. LEC is operating as expected in the current fiscal year.

Pursuant to the Lodi Energy Center Power Sales Agreement (the "LEC Power Sales Agreement"), by and among NCPA and (i) the NCPA Member project participants: Biggs, Gridley, Healdsburg, Lodi, Lompoc, Plumas-Sierra, Santa Clara, Ukiah and BART; and (ii) the non-NCPA Member project participants: the City of Azusa, the Modesto Irrigation District, the Power and Water Resources Pooling Authority and the California Department of Water Resources (all such entities other than NCPA, collectively the "LEC Project Participants"), NCPA agreed to construct and operate the Lodi Energy Center and has sold the capacity and energy of the Lodi Energy Center to the thirteen LEC Project Participants on a "take-or-pay" basis, in accordance with their respective generation entitlement shares to the capacity and energy of the Lodi Energy Center.

NCPA financed a portion of the costs of construction of the Lodi Energy Center through the issuance of revenue bonds: (i) its Lodi Energy Center Revenue Bonds, Issue One, issued on behalf of eleven of the thirteen participants in the Lodi Energy Center (being all of the above-named LEC Project Participants other than the Modesto Irrigation District and the California Department of Water Resources), of which \$220.9 million is outstanding as of June 3, 2019, and (ii) its Lodi Energy Center Revenue Bonds, Issue Two, issued on behalf of the California Department of Water Resources, of which \$110.2 million is outstanding as of June 3, 2019. The Modesto Irrigation District provided its own financing for its share of the estimated costs of construction of the Lodi Energy Center. See "Indebtedness" for each of the Significant Share Project Participants in "APPENDIX A-SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS" for a discussion of the obligations of each of Lodi and Santa Clara with respect to the Lodi Energy Center Project.

The Lodi Energy Center is operated and maintained by NCPA under the general direction of the LEC Project Participants pursuant to the LEC Power Sales Agreement and the Lodi Energy Center Project Management and Operations Agreement among NCPA and the LEC Project Participants.

Geothermal Project

NCPA has developed a geothermal project (the “Geothermal Project”) located on federal land in certain areas of Sonoma and Lake Counties, California (the “Geysers Area”). In addition to the geothermal leasehold, wells, gathering system and related facilities, the Geothermal Project consists of two electric generating stations (Plant 1 and Plant 2), with combined 165 MW (nameplate rating) turbine generator units utilizing low pressure, low temperature geothermal steam, associated electrical, mechanical and control facilities, a heat dissipation system, a steam gathering system, a transmission tapline and other related facilities. Geothermal steam for the project is derived from the geothermal property, which includes wellpads, access roads, steam wells and reinjection wells. NCPA formed two not-for-profit corporations controlled by its Members to own the generating plants of the Geothermal Project. NCPA manages the Geothermal Project for the corporations and is entitled to all the capacity and energy generated by the Geothermal Project.

As noted above, the Geothermal Project consists of two operating electric generating stations (Plant 1 and Plant 2), where Plant 1 contains two 55 MW (nameplate rating) turbine generator units, and Plant 2 contains one 55 MW (nameplate rating) turbine generator unit. Plant 1 and Plant 2 were originally developed and operated as separate projects referred to as “Geothermal Project Number 2” and “Geothermal Project Number 3,” respectively. Plant 1 became operational in 1983 and Plant 2 became operational in 1986. Plant 1 and Plant 2 are now operated together as the Geothermal Project pursuant to the terms of the Amended and Restated Geothermal Operating Agreement.

Steam for NCPA’s geothermal plants comes from lands in the Geysers Area, which are leased by NCPA from the federal government. NCPA operates these steam-supply areas. Operation of the geothermal plants at high generation levels, together with high steam usage by others in the same area, resulted in a decline in the steam production from the steam wells at a rate greater than expected. As a result, starting in 1988, NCPA has been taking steps to reduce the rate of steam production decline. NCPA entered into agreements with other geothermal operators in the Geysers Area to finance and construct the Southeast Geysers Effluent Pipeline Project, which was completed in September 1997 and began operating soon thereafter. The 26-mile pipeline collects wastewater from Lake County Sanitation District treatment plants at Clearlake and Middletown and delivers the wastewater to NCPA and the other Geysers steam field operator for injection into the steam field. In 2018, NCPA received approximately 40% of the wastewater for reinjections from this effluent pipeline.

NCPA has also implemented and continues to implement various operating strategies and modifications to further reduce the rate of decline in steam production. NCPA has modified all of the steam turbines and the associated steam collection system to enable generation with lower pressure steam and increased conversion efficiencies of the available steam resource.

Average annual generation of the Geothermal Project was approximately 101 MW gross (“MWG”) for calendar year (“CY”) 2018. Based on current operating protocols and forecasted operations, after CY 2018, both the average and peak capacity are expected to continue to decrease, reaching approximately 98.1 MW in CY 2019 and 71.5 MWG by CY 2040. Under terms of the federal geothermal leasehold agreements, which became effective August 1, 1974, the leasehold had a 10-year primary term with provision for renewal as long thereafter as geothermal steam is produced or utilized, but not longer than 40 years. At the expiration of that period, if geothermal steam is still being produced, NCPA has preferential right to renew the leasehold for a second term. In 2013, NCPA renewed the leasehold. The leasehold also requires NCPA to remove its leasehold improvements including the

geothermal plants and steam gathering system when and if NCPA abandons the leasehold. Based upon a decommissioning costs study obtained by NCPA in December 2016, these decommissioning costs are currently estimated to total approximately \$59.3 million. NCPA has been collecting monies to pay the expected decommissioning costs since 2007 and holds \$18.1 million in a reserve for such purpose as of June 30, 2018. Collections towards future decommissioning costs are expected to be approximately \$1.8 million for Fiscal Year 2018-19.

Each of the Significant Share Project Participants, together with Biggs, Gridley, Healdsburg, Lompoc, Ukiah and Plumas Sierra, along with non-NCPA Member Turlock Irrigation District, participate in the Geothermal Project. NCPA has sold the capacity and energy of the Geothermal Project to the Geothermal Project participants on a “take-or-pay” basis, in accordance with their respective project entitlement percentages to the capacity and energy of the Geothermal Project. NCPA financed the Geothermal Project with Geothermal Project Number 3 Revenue Bonds, of which \$24.5 million were outstanding as of June 3, 2019. See “Indebtedness” for each of the Significant Share Project Participants in “APPENDIX A–SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS” for a discussion of the obligations of each of the Significant Share Project Participants with respect to the Geothermal Project.

Geysers Transmission Project

In order to meet certain obligations required of NCPA to secure transmission and other support services for the Geothermal Project, NCPA has undertaken a geysers transmission project (the “Geysers Transmission Project”) with the Geysers Transmission Project participants. The Geysers Transmission Project includes (i) a co-tenancy interest in PG&E’s 230 kV line from Castle Rock Junction in Sonoma County to the Lakeville Substation (the “Castle Rock to Lakeville Line”), (ii) additional firm transmission rights in the Castle Rock to Lakeville Line and (iii) the Central Dispatch Facility.

NCPA financed the Geysers Transmission Project through the issuance of Transmission Project Number One Revenue Bonds, which bonds were retired as of August 15, 2010. Alameda, Lodi, Palo Alto and Roseville, together with Biggs, Gridley, Healdsburg, Lompoc, Ukiah and Plumas Sierra, are participants in the Geysers Transmission Project.

Capital Facilities Project

The NCPA Capital Facilities Project, known as Combustion Turbine Project Number Two, currently consists of one power generating station, Unit One, with a design rating of 49.9 MW located in the City of Lodi. Such power generating station consists of a single natural gas-fired steam injected gas turbine (STIG), generator, and required auxiliary and electrical interconnection systems.

The Cities of Alameda, Lodi, Lompoc and Roseville are the project participants in the Capital Facilities Project. NCPA has sold the capacity and energy of the Capital Facilities Project to the Capital Facilities Project participants on a “take-or-pay” basis, in accordance with their respective project entitlement percentages to the capacity and energy of the Capital Facilities Project. NCPA financed the Capital Facilities Project with Capital Facilities Revenue Bonds, of which approximately \$29.6 million were outstanding as of June 3, 2019. See “Indebtedness” for each of the Significant Share Project Participants in “APPENDIX A–SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS” for a discussion of the obligations of each of Alameda, Lodi and Roseville with respect to the Capital Facilities Project.

Unit One is economically dispatched to meet the Capital Facilities Project participants’ load, depending on the amount of generation available from NCPA’s hydroelectric project and prices of alternative electric energy supplies, to meet other NCPA Members’ load or to sell power to third parties depending on natural gas prices and electric energy prices.

Combustion Turbine Project Number One

The Combustion Turbine Project Number One (the “Combustion Turbine Project”) originally consisted of five combustion turbine units, each nominally rated 25 MW, with two units located in each of Roseville and Alameda and one in Lodi. Sale of the two units located in Roseville to the City of Roseville (an original participant in the Combustion Turbine Project) was effective on September 1, 2010, and the remaining Combustion Turbine Project includes only the two units in Alameda and the one unit in Lodi.

The Combustion Turbine Project provides capacity (i) that is economically dispatched during the peak load period to the extent permitted by air quality restrictions and (ii) to be used to meet the certain capacity reserve requirements (*e.g.*, resource adequacy requirements). This resource provides the capacity below current spot market prices for capacity but as is typical of this type of technology, the average cost for power per kWh of power delivered to the participants in the Combustion Turbine Project is comparatively expensive.

Alameda, Lodi and Santa Clara, together with Healdsburg, Lompoc, Ukiah and Plumas-Sierra, are the current participants in Combustion Turbine Project Number One. NCPA has sold the capacity and energy of the Combustion Turbine Project to the Combustion Turbine Project participants on a “take-or-pay” basis, in accordance with their respective project entitlement percentages to the capacity and energy of the Combustion Turbine Project. NCPA financed the Combustion Turbine Project through the issuance of Combustion Turbine Project Number One Revenue Bonds, which bonds were retired as of August 15, 2010.

Natural Gas Supply Arrangements

NCPA, on behalf of the project participants of Combustion Turbine Project and of the Capital Facilities Project’s Unit One, has entered into a Master Transaction Confirmation that is appended to and made part of a Base Contract for Sale and Purchase of Natural Gas (the “Consolidated Natural Gas Agreement”), effective on October 30, 2012, with EDF Trading North America, LLC (“EDF”). The Consolidated Natural Gas Agreement provides gas supply and management services, including the following:

- Supply of spot market gas for the full daily output of Combustion Turbine Project Number One and Unit One of the Capital Facilities Project (approximately 35,136 MMBtu/day); and
- Scheduling, nomination, balancing and settlement services for NCPA gas supplies from third parties.

The contract with EDF automatically renews each year on January 1, unless terminated earlier by six months written notice by either party.

Pursuant to a 30-year agreement terminating in October 2023 with various natural gas pipeline management companies, NCPA has entitlement rights to natural gas pipeline capacity of approximately 2,743 MMBtu/day sourced at AECO (Alberta) and sinking at PG&E Citygate (California). The four pipeline segments that are included in the contiguous pipeline entitlement include pipeline contained in the following natural gas systems: NOVA Gas Transmission Ltd. (NOVA), Foothills Pipelines (Foothills), Gas Transmission Northwest (GTN), and PG&E’s CGT (CGT). NCPA’s natural gas pipeline rights are managed by Mercuria Energy America, Inc., pursuant to an Asset Management Agreement for Pipeline Transport Capacity dated January 1, 2015. For release of such natural gas pipeline to Mercuria Energy America, Inc., NCPA is paid the value of the unused pipeline capacity by the pipeline manager.

In addition, NCPA and EDF entered into an agreement to provide the gas supply and the nomination, imbalance and settlement services for NCPA's Lodi Energy Center, which became effective on September 1, 2016. See " – Lodi Energy Center Project" above.

Power Purchase Agreements and Natural Gas Program

Seattle City Light Exchange Agreement. NCPA, on behalf of Healdsburg, Palo Alto, Ukiah, Lodi and Roseville, entered into a seasonal exchange agreement with Seattle City Light for 60 MW of summer capacity and energy and a return of 46 MW of capacity and energy in the winter. Deliveries under the agreement began June 1, 1995. Effective May 31, 2008, Healdsburg, Palo Alto and Roseville assigned their participation percentages to Santa Clara. NCPA terminated the exchange agreement with Seattle City Light effective on May 31, 2018.

Henwood Power Purchase Agreement. NCPA, on behalf of Alameda, entered into a power purchase agreement with Henwood Associates, Inc. for 440 kW of capacity and energy. The energy source for the facility is hydroelectric and the facility meets the qualifying facilities requirements, established by FERC. The facility output, which varies with hydrological conditions, has averaged about 2,000 megawatt hours ("MWhs") per year. Deliveries under the agreement began February 1, 2010 and will terminate on January 31, 2030.

Antelope Expansion Power Purchase Agreement. NCPA, on behalf of Biggs, Gridley, Healdsburg, Lodi and Port of Oakland, entered into a power purchase agreement with Antelope Expansion 1B, LLC, for a 33.78%, or approximately 17 MW, share of the output of the Antelope Expansion Phase 1 solar facility. The facility is a 51 MW photovoltaic plant under development in the City of Lancaster, Los Angeles County, California. The facility is expected to reach commercial operation on December 31, 2021. The term of the power purchase agreement is 20 years.

Market Purchase Program. NCPA, on behalf of Alameda, BART, Biggs, Gridley, Healdsburg, Lodi, Lompoc and Ukiah may enter into supply agreements for terms of up to five years utilizing Commission approved Edison Electric Institute and WSPP Inc. Purchase Agreements. Procurement terms and conditions are governed by a Market Purchase Program agreement between NCPA and the participating Members listed in the preceding sentence. Purchase amounts are limited to 115% of each participating members forecast net open position associated with the period of the procurement. The Program was approved by the Commission on July 26, 2007.

Natural Gas Program. NCPA, on behalf of Biggs, Gridley, Healdsburg, Lodi, Lompoc and Ukiah may enter into gas supply agreements (i) using competitive bids submitted in response to a NCPA Request For Proposals ("RFP Process"), or (ii) through direct purchases from the State of California Department of General Services Natural Gas Services Program. Procurement terms and conditions are governed by a Natural Gas Program agreement between NCPA and the participating Members identified in the preceding sentence. Purchases are subject to limits as may be changed from time to time as outlined in the NCPA Energy Risk Management Policy and/or Regulations. The Natural Gas Program was approved by the Commission on March 24, 2011.

NCPA Services Agreements

BART Services Agreement. NCPA provides power supply and scheduling services to BART pursuant to a Single Member Services Agreement which was executed on December 1, 2005 (as amended from time to time). Under this agreement, NCPA procures power to meet BART's power supply needs utilizing Commission approved Edison Electric Institute and WSPP Inc. Purchase Agreements.

Non-Member Customer Services Agreements. NCPA, pursuant to individual Services Agreements, supplies a variety of wholesale energy market services to non-member customers, including,

but not limited to, scheduling services, operating services, and portfolio management services. NCPA is currently providing non-member services to the Merced Irrigation District, Placer County Water Agency, Pioneer Community Energy, East Bay Community Energy, and San Jose Clean Energy, under Services Agreements that extend for varying terms ranging from December 31, 2019 to June 30 2022. See “NORTHERN CALIFORNIA POWER AGENCY – Wholesale Power Trading and Other Activities.”

RATE REGULATION

Each Project Participant and NCPA sets rates, fees and charges for electric service. The authority of the Project Participants or NCPA to impose and collect rates and charges for electric power and energy sold and delivered is not subject to the general regulatory jurisdiction of the California Public Utilities Commission (“CPUC”) and presently neither the CPUC nor any other regulatory authority of the State of California nor FERC approves such rates and charges. Although the retail rates of the Project Participants and NCPA are not subject to approval by any federal agency, the Project Participants and NCPA are subject to certain ratemaking provisions of the Federal Public Utility Regulatory Policies Act of 1978 (“PURPA”) and Sections 211-213 of the Federal Power Act (“FPA”). It is possible that future legislative and/or regulatory changes could subject the rates and/or service areas of the Project Participants or NCPA to the jurisdiction of the CPUC or to other limitations or requirements.

FERC could potentially assert jurisdiction over rates of licensees of hydroelectric projects and customers of such licensees under Part I of the FPA, although it has not as a practical matter exercised or sought to exercise such jurisdiction to modify rates that would legitimately be charged. If it did assert such jurisdiction, the result might have some significance for NCPA and its Project Participants.

Under provisions of the FPA, FERC has the authority, under certain circumstances and pursuant to certain procedures, to order any utility (municipal or otherwise) to provide transmission access to others at FERC-approved rates. In addition, the Energy Policy Act of 2005 expanded FERC’s jurisdiction to require municipal utilities that sell more than eight million MWhs of energy per year to pay refunds under certain circumstances for sales into organized markets. To date, neither NCPA nor any of the Project Participants meet this threshold requirement.

The California Energy Commission (the “CEC”) is authorized to evaluate rate policies for electric energy as related to the goals of the Energy Resources Conservation and Development Act and to make recommendations to the Governor, the Legislature and publicly owned electric utilities.

CONSTITUTIONAL LIMITATIONS IN CALIFORNIA AFFECTING FEES AND CHARGES

The following is a discussion of certain limitations under provisions of the California Constitution that may affect the rates, fees and charges imposed by the Project Participants for the electric services they provide.

Proposition 218 and Proposition 26

Proposition 218, a State ballot initiative known as the “Right to Vote on Taxes Act,” was approved by the voters of the State of California on November 5, 1996. Proposition 218 added Articles XIIIIC and XIID to the State Constitution. Article XIIIIC imposes a majority voter approval requirement on local governments (including the Project Participants) with respect to taxes for general purposes, and a two-thirds voter approval requirement with respect to taxes for special purposes. Article XIID creates additional requirements for the imposition by most local governments of general taxes, special taxes, assessments and “property-related” fees and charges. Article XIID explicitly exempts fees for the provision of electric service from the provisions of such article.

Article XIIC expressly extends the people’s initiative power to the reduction or repeal of local taxes, assessments, and fees and charges imposed prior to its effective date (November 1996). The California Supreme Court held in *Bighorn-Desert View Water Agency v. Verjil*, 39 Cal.4th 205 (2006) that, under Article XIIC, local voters by initiative may reduce a public agency’s water rates and delivery charges, as those are property-related fees or charges within the meaning of Article XIID, and noted that the initiative power described in Article XIIC may extend to a broader category of fees and charges than the property-related fees and charges governed by Article XIID. Moreover, in the case of *Bock v. City Council of Lompoc*, 109 Cal.App.3d 52 (1980), the Court of Appeal determined that an electric rate ordinance was not subject to the same constitutional restrictions that are applied to the use of the initiative process for tax measures so as to render it an improper subject of the initiative process. Thus, electric service charges (which are expressly exempted from the provisions of Article XIID) may be subject to the initiative provisions of Article XIIC, thereby subjecting such fees and charges to reduction by the electorate. NCPA and the Project Participants believe that even if the electric rates of the Project Participants are subject to the initiative power, under Article XIIC or otherwise, Article XIIC does not grant to the electorate of a Project Participant the power to repeal or reduce its electric rates and charges in a manner that would be inconsistent with the contractual obligations of the Project Participant (including those under the Third Phase Agreement).

The California electorate approved Proposition 26 at the November 2, 2010 election, amending Article XIIC of the California Constitution. Proposition 26 was designed to supplement tax limitations California voters adopted when they approved Proposition 13 in 1978, and Proposition 218 in 1996. Proposition 26 applies by its terms to any levy, charge or exaction imposed, increased or extended by a local government on or after November 3, 2010. Proposition 26 deems any such levy, charge or fee to be a “tax”, requiring voter approval under Article XIIC unless it comes within one of the listed exceptions. Proposition 26 expressly excludes from its definition of a “tax,” among other things, a “charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product.” Proposition 26 is applicable to the electric rates of governmental entities such as the Project Participants; therefore, newly adopted rates must conform to its requirements.

Proposition 26 is subject to interpretation by California courts, including the extent to which it is applicable to pre-existing electric rates and general fund transfers. Alameda and Palo Alto, two of the Significant Share Project Participants, are currently engaged in litigation filed against the respective city, generally alleging that the annual transfer of funds from the electric utility to the city’s general fund is an unauthorized tax for purposes of Article XIIC of the California Constitution in violation of Proposition 26. See “APPENDIX A–SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS – CITY OF ALAMEDA – Litigation” and “– CITY OF PALO ALTO – Litigation.”

Other Initiatives

Articles XIIC and XIID and the amendments effected thereto by Proposition 26 were adopted as measures that qualified for the ballot pursuant to California’s initiative process. From time to time, including presently, other initiatives have been, and could be, proposed, and if qualified for the ballot, could be enacted which place limitations on the ability of NCPA and/or the Project Participants to raise rates or otherwise affect NCPA’s and/or the Project Participants revenues or operations. Neither the nature and impact of these measures nor the likelihood of qualification for ballot or passage can be anticipated by NCPA and the Project Participants.

CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

The following discussion of legislative, regulatory and other factors affecting the electric utility industry should be considered when evaluating NCPA, the Project and the Project Participants and considering an investment in the 2008 Bonds. NCPA is unable to predict what impact such factors will have on the business operations and/or financial condition of any individual Project Participant or whether any additional legislation or rules will be enacted which will affect NCPA, the Project or the Project Participant's finances or operations, but the impacts could be significant. This discussion does not purport to be comprehensive or definitive, and these matters are subject to change subsequent to the date hereof. Extensive information on the electric utility industry is available from the legislative and regulatory bodies and other sources in the public domain, and potential purchasers of the 2008 Bonds should obtain and review such information. Such information is not incorporated herein by reference.

State Legislation and Regulatory Proceedings

A number of bills affecting NCPA, the Project Participants and the electric utility industry have been introduced or enacted by the California Legislature in recent years. In general, these bills reflect California climate policy developments by regulating greenhouse gas ("GHG") emissions and providing for greater investment in energy efficiency and environmentally friendly generation and storage alternatives, principally through more stringent renewable resource portfolio standard requirements. Recently enacted legislation has also focused on addressing issues relating to wildfire risks and occurrences in California, including imposing certain requirements on electric utilities in connection with planning for and mitigation of such occurrences and risks. Pursuant to enacted legislation, State regulatory agencies such as the California Air Resources Board ("CARB") and the CEC are also pursuing a number of regulatory programs designed to reduce greenhouse gas emissions and encourage or mandate renewable energy generation. Set forth below is a brief summary of certain of these bills and regulatory proceedings.

GHG Regulations; Cap-and-Trade. In September 2006, then-Governor Schwarzenegger signed into law the California Global Warming Solutions Act of 2006 or AB 32 (the "Global Warming Solutions Act"). This law requires CARB to adopt enforceable GHG emission limits and emission reduction measures in order to reduce GHG emissions from within the State to 1990 levels by 2020. In September 2016, then-Governor Brown signed into law an amendment to the Global Warming Solutions Act, or SB 32, that requires CARB to take such actions to ensure that statewide GHG emissions from within the State are reduced to at least 40% below 1990 levels by 2030.

The Global Warming Solutions Act established an annual mandatory reporting requirement for all IOUs, local publicly-owned electric utilities ("POUs") and other load-serving entities (electric utilities providing energy to end-use customers) to inventory and report greenhouse gas emissions to CARB, required CARB to adopt regulations for significant greenhouse gas emission sources and gave CARB the authority to enforce such regulations beginning in 2012. The Project Participants are complying with the applicable reporting requirements under the Global Warming Solutions Act.

CARB implemented the Global Warming Solutions Act through a series of regulations (collectively referred to as the "Cap-and-Trade Regulations") that imposed aggregate emissions limitations on the electricity generation industry in California. The Cap-and-Trade Regulations require all regulated entities to obtain and submit to CARB compliance instruments (allowances and/or offsets) with respect to GHG emissions relating to its State generation activities, as well as for imported electricity from dedicated out-of-state resources. NCPA and the Project Participants, like other electric utilities, receive administrative allocations of allowances for some of their expected GHG emissions. Entities that emit GHGs at levels above those for which they receive administrative allocations, if any, must purchase the additional allowances they require at the CARB auctions or from other covered entities with surplus

allowances. In addition, NCPA and the Project Participants may indirectly bear compliance costs for independent generators that must purchase allowances for their generation.

In July 2017, then-Governor Brown signed into law AB 398 to extend the state's Cap-and-Trade Regulation from 2021 to 2030. The bill passed both houses with a 2/3 supermajority vote, which protects the legislation from certain legal challenges. Under AB 398, CARB is directed to address the following: establish a price ceiling, offer non-tradeable allowances at two price containment points below the price ceiling, transfer current vintages unsold for more than 24 months to the allowance price containment reserve, evaluate and address allowance over-allocation concerns, set industry assistance factors for allowance allocation, and establish allowance banking rules. AB 398 was passed in conjunction with AB 617, which strengthens the monitoring of criteria air pollutants and toxic air contaminants in local communities. Amendments to the Cap-and-Trade Regulation adopted by CARB to reflect the requirements of AB 398 went into effect on April 1, 2019.

Also in July 2017, CARB approved various amendments to the Cap-and-Trade Regulation, which amendments took effect on October 1, 2017. The amendments included revised allowance allocations to electrical distribution utilities from 2021 to 2030. Project Participants are expected to receive more than \$400 million in proceeds from the sale of these allowances, which will substantially minimize the impact of CARB's requirement to purchase allowance on Project Participants' finances and operations.

In connection with the approval of the Cap-and-Trade Regulation amendments in July 2017, CARB adopted CARB Board Resolution 17-21, which directs CARB staff to consider requiring all electric distribution utilities to consign all administratively allocated allowances to auction. Currently, IOUs are required to consign their allowances to CARB's auctions, as are POUs whose generation accesses the CAISO Balancing Authority. POUs served by non-CAISO Balancing Authorities have the option of placing their allowances to their compliance account to cover emissions from their generating stations and/or consigning a portion of allowances to CARB's auctions. Action taken by CARB in December 2018 aimed at reducing compliance costs and promoting stability in the market include providing a price ceiling for allowances, authorizing CARB to sell reserve allowances at fixed prices, and if needed, sell additional allowances beyond the annual cap. Those rules are expected to become effective on April 1, 2019.

GHG Emissions Performance Standard and Financial Commitment Limits. SB 1368 (Chaptered in 2006) provided for an emission performance standard ("EPS") restricting new investments in baseload electric generating resources that exceed a specified rate of greenhouse gas emissions. SB 1368 allows the CEC to establish a regulatory framework to enforce the EPS for POUs. Pursuant to SB 1368, the CEC adopted a GHG EPS for electric generating facilities of 1,100 pounds of carbon dioxide (CO₂) per MWh for "covered procurements" by POUs. SB 1368 also prohibits POUs from making any "long-term financial commitment" in connection with "baseload generation" that does not satisfy the EPS. Generally, a "long term financial commitment" is any new or renewed power purchase agreement with a term of five years or more, the purchase of an interest in a new power plant or any investment, other than routine maintenance, in an existing power plant that extends the life of the plant by more than five years or results in an increase in its rated capacity. "Baseload generation" means a power plant that is intended to operate at an annualized capacity factor of 60 percent or more.

As modified, the EPS regulations require a POU to post a notice of a public meeting at which its governing board will consider any expenditure over \$2.5 million to meet environmental regulatory requirements at a non-EPS compliant baseload facility. In addition, each POU is required to file an annual notice identifying all investments over \$2.5 million that it anticipates making during the subsequent 12 months on non-EPS compliant baseload facilities to comply with environmental regulatory requirements. This requirement is waived for any POU that has entered into a binding agreement to divest within five years of all baseload facilities exceeding the EPS. CEC staff has confirmed that the \$2.5 million threshold

applies to an individual investment by each utility, and not the combined investment of all participants in a project.

2030 GHG Emissions Targets. SB 350, the Clean Energy and Pollution Reduction Act of 2015, was signed by then-Governor Brown in October 2015. Among other things, SB 350 requires CARB, in consultation with the CPUC and the CEC, to establish 2030 GHG emission targets for each electric utility in the State. At present, these targets are non-binding, and primarily intended to help the State measure progress toward the 2030 statewide goal outlined in SB 32. The targets, however, are an input to the development of the Integrated Resource Plans that are required of the State's 16 largest POUs, which include the four largest NCPA member systems (Santa Clara, Roseville, Redding, and Palo Alto). See “–Integrated Resource Plans (IRP)” below.

Energy Procurement and Efficiency Reporting. SB 1037, signed by then-Governor Schwarzenegger in September 2005, requires that each POU, including the Project Participants, prior to procuring new energy generation resources, first acquire all available energy efficiency, demand reduction, and renewable resources that are cost effective, reliable and feasible. SB 1037 also requires each POU to report annually to its customers and to the CEC its investment in energy efficiency and demand reduction programs. The Project Participants are complying with such ongoing reporting requirements.

Further, AB 2021, chaptered in 2006, requires that POUs establish, report, and explain the basis of the annual energy efficiency and demand reduction targets by June 1, 2007 and every three years thereafter for a ten-year horizon. A subsequent amendment, AB 2227, extended the reporting timeframe from three to four years. The Project Participants are complying with such ongoing reporting requirements. The information obtained from the POUs is being used by the CEC to present progress made by the State to double energy efficiency savings in electricity and natural gas final end uses by 2030, to the extent doing so is cost effective, feasible, and does not adversely impact public health and safety, as prescribed in SB 350.

California Renewables Portfolio Standard. California's legislature and executive branch have been active in promoting increasingly stringent renewable energy procurement requirements since 2002. Early efforts established a renewables portfolio standard (“RPS”) of 20% of renewable electricity generation by 2017. Since then, both legislative and executive branch initiatives have raised that standard in multiple phases.

On April 12, 2011, then-Governor Brown signed into law the California Renewable Energy Resources Act, or SBX1-2. SBX1-2 requires each POU to adopt and implement a renewable energy resource procurement plan. The plan must require the utility to procure a minimum quantity of electricity products from eligible renewable energy resources, which may include renewable energy certificates (“RECs”), as a proportion of total kilowatt hours sold to the utility's retail end-use customers to achieve the following targets: (i) an average of 20% for the period January 1, 2011 to December 31, 2013, inclusive; (ii) 25% by December 31, 2016; and (iii) 33% by December 31, 2020. In addition to the specific requirements in 2016 and 2020, SBX1-2 also required procurement of quantities of renewable energy resources in the years 2014-2015 and 2017-2019 sufficient to show reasonable progress toward achieving the above goals. The governing boards of POUs are responsible for implementing the requirements of SBX1-2, rather than the CPUC, as is the case for the IOUs. In addition, the CEC was given certain enforcement authority for POUs and CARB was given the authority to set penalties. The CEC has developed detailed rules to implement SBX1-2, and has adopted regulations for the enforcement of the RPS program requirements for POUs, which regulations have been subsequently amended from time to time.

SB 350, as enacted in 2015, establishes an RPS target of 50% by December 31, 2030 for the amount of electricity generated and sold to retail customers from eligible renewable energy resources for retail sellers and POU, including interim targets of (i) 40% of retail sales from eligible renewable energy resources by December 31, 2024; (ii) 45% of retail sales from eligible renewable energy resources by December 31, 2027; and (iii) 50% of retail sales from eligible renewable energy resources by December 31, 2030.

SB 100, the 100 Percent Clean Energy Act of 2018, was signed into law by then-Governor Brown in September 2018. SB 100 accelerates the State's RPS target as established by SB 350 from 50% by 2030 to 60% by 2030 and sets a goal of 100% "clean energy" by the year 2045. SB 100 requires retail electric sellers and POU to procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kWhs of those products sold to retail end-use customers achieve (i) 44% of retail sales by December 31, 2024; (ii) 52% of retail sales by December 31, 2027; and (iii) 60% of retail sales by December 31, 2030. SB 100 additionally establishes that it is the policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045.

See "APPENDIX A–SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS" for information regarding the status of compliance of each of the Significant Share Project Participants with RPS targets under current State law.

Integrated Resource Plans (IRP). SB 350 requires that all POU with demand greater than 700 gigawatt hours to develop an IRP at least once every five years, no later than January 1, 2019. Four NCPA members are subject to this requirement (Santa Clara, Roseville, Redding, and Palo Alto). Each of such members has completed its IRP within the required timeline. As required in the statute, all IRPs will be submitted to the CEC, including information outlined in the CEC's POU IRP Guidelines that were finalized in August 2017.

Legislation Relating to Wildfires; Related Risks. SB 1028 (chaptered in 2016), requires that each POU and each electric cooperative in the State construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment. SB 1028 required the governing board of each POU to determine, based on historical fire data and local conditions, and in consultation with the fire departments or other entities responsible for the control of wildfires within the geographical area where the utility's overhead electrical lines and equipment are located, whether any portion of that geographical area has a significant risk of wildfire resulting from those electrical lines and equipment, and if so, to present for board approval wildfire mitigation measures the utility intends to undertake to minimize the risk of its overhead electrical lines and equipment causing a catastrophic wildfire.

SB 901 (chaptered in 2018), amended certain provisions of SB 1028 requiring POU and electric cooperatives to prepare wildfire mitigation measures if the utilities' overhead electrical lines and equipment are located in an area that has a significant risk of wildfire resulting from those electrical lines and equipment. Under SB 901, each POU or electric cooperative is required to prepare before January 1, 2020 and annually thereafter, a wildfire mitigation plan. SB 901 requires specified information and elements to be considered as necessary, at minimum, in the wildfire mitigation plan. The POU or electric cooperative is required to present each wildfire mitigation plan in an appropriately noticed public meeting, and to accept comments on its wildfire mitigation plan from the public, other local and state agencies, and interested parties. In addition, SB 901 requires the POU or electric cooperative to contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The report of the independent evaluator is to be made available to the public and to be presented at a public meeting of the POU's governing board.

A number of wildfires occurred in California in 2017 and 2018. Under the doctrine of inverse condemnation (a legal concept that entitles property owners to just compensation if their property is damaged by a public use), California courts have imposed liability on utilities in legal actions brought by property holders for damages caused by the utility's infrastructure. Thus, if the facilities of a utility, such as its electric distribution and transmission lines, are determined to be the substantial cause of a fire, and the doctrine of inverse condemnation applies, the utility could be liable for damages without having been found negligent. SB 901 does not address the existing legal doctrine relating to utilities' liability for wildfires. How any future legislation addresses California's inverse condemnation and "strict liability" issues for utilities in the context of wildfires in particular could be significant for the electric utility industry.

NCPA's Commission adopted a Wildfire Mitigation Plan in response to SB 1028 in August of 2018, in which NCPA has identified a series of measures intended to reduce the risks of wildfire occurrences related to the operation of its facilities and equipment. In accordance with SB 901, NCPA is updating its Wildfire Mitigation Plan to include all of the information and elements proscribed in SB 901, which is expected to be completed in advance of the required January 1, 2020 date. Measures currently undertaken by NCPA include, among others, a program for the physical inspection of its overhead electrical transmission and distribution lines each year, and routine replacement of poles, towers and insulators as needed, as well as established guidance for the operation of specific facilities during emergency conditions, including wildfires. NCPA owns relatively few miles of overhead electrical transmission and distribution lines and conducts a complete inspection of any line that has tripped out of service prior to re-closing the circuit. In addition, NCPA has developed and implemented a transmission and vegetation management program to provide for the inspection, maintenance, documentation and reporting requirements for vegetation located within or adjacent to NCPA's power line right-of-way in accordance with the standards established by the California Department of Forestry and Fire Protection ("Cal Fire"), state statute and/or the North American Electric Reliability Corporation ("NERC"). NCPA also maintains general liability insurance that would include coverage for wildfires. It should be noted, however, that potential liabilities for utilities in connection with wildfires has adversely impacted the market for insurance, leading to a reduction in underwriting capacity and increased premiums, which effects are expected to continue. For information regarding the wildfire mitigation measures of certain of the Significant Share Project Participants, see also "APPENDIX A – SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS.

In April 2019, Governor Newsom released a report of findings of an appointed working group examining the State's wildfires and associated liability. The report provided recommendations for changes in State fire prevention and response, including updating some local building codes to include rules on defensible space and additional work to identify sufficient evacuation routes, as well as increasing the wildfire prevention responsibilities of utility regulators. The report recommended that the Commission on Catastrophic Wildfire Cost and Recovery (established in the Governor's Office of Planning and Research pursuant to SB 901), evaluate certain concepts for the development of a new model for addressing wildfire-related liabilities for utilities and report back to the Governor and the Legislature on its findings. The concepts recommended for exploration in the report include: (i) the creation of a State fund to provide investor-owned utilities access to cash to pay wildfire damage claims while state regulators decide if the utilities can pass the cost to ratepayers; (ii) the potential of a change to the strict liability standard for wildfires under inverse condemnation to a fault-based standard; and (iii) the establishment of a wildfire fund created by pooling money from the investor-owned utilities to pay for catastrophic wildfire claims (with the possibility of participation by municipally-owned utilities at their option). NCPA and the Project Participants are unable to predict what actions, if any, will arise at the State level resulting from the report or what the ultimate impact may be on the electric utility industry.

Impact of California Energy Market Developments on NCPA and the Project Participants. The effect of the developments in the California energy markets described above on the Project Participants

cannot be fully ascertained at this time. Also, volatility in energy prices in California may return due to a variety of factors that affect both the supply and demand for electric energy in the western United States. These factors include, but are not limited to, the adequacy of generation resources to meet peak demands, the availability and cost of renewable energy, the impact of economy-wide greenhouse gas emission legislation and regulations, fuel costs and availability, weather effects on customer demand, the impact of climate change, transmission congestion, the strength of the economy in California and surrounding states and levels of hydroelectric generation within the region (including the Pacific Northwest). This price volatility may contribute to greater volatility in the revenues of the Project Participants' respective electric systems from the sale (and purchase) of electric energy and, therefore, could materially affect each of the Project Participant's financial condition. Each Project Participant undertakes resource planning and risk management activities and manages its resource portfolio to mitigate such price volatility and spot market rate exposure. For a discussion of each of the Significant Share Project Participant's current resource planning activities, see "Power Supply Resources" in each of the Significant Share Project Participants sections in "APPENDIX A-SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS."

Federal Energy and Environmental Policies and Legislation

Federal Policy on Cybersecurity. In February 2013, then-President Obama issued an Executive Order "Improving Critical Infrastructure Security." Among other things, such Executive Order called for improved information sharing and processing of security clearances for owners and operators of critical infrastructure. The Executive Order further required the Secretary of Commerce to direct the National Institute of Standards and Technology ("NIST") to lead the development of a framework ("Framework") to reduce cyber risks to critical infrastructure. The voluntary Framework will continue to be updated and improved as industry provides feedback on implementation.

The Cybersecurity Information Sharing Act of 2015 was signed into law in December 2015. It creates an industry-supported, voluntary cybersecurity information sharing program which facilitates the secure sharing of cyber-related threat information among both public and private sector entities. NCPA participates in sharing and receiving information about cybersecurity threats in real time through a central hub as a tool to actively manage risk related to potential cyber intrusion.

Federal Power Act. Although NCPA and its members are exempt from most federal rate regulation pursuant to Section 201(f) of the FPA (see "RATE REGULATION"), the Federal Energy Policy Act of 2005 ("EPAct 2005"), imposed specific exceptions. In particular, FERC was given authority over the behavior of market participants. Under FERC's authority it can impose penalties on any seller for using a manipulative or deceptive device, including market manipulation, in connection with the purchase or sale of energy or of transmission service. The Commodity Futures Trading Commission ("CFTC") also has jurisdiction to enforce certain types of market manipulation or deception claims under the Commodity Exchange Act.

Additionally, pursuant to Section 215 of the FPA, and FERC's implementing regulations and orders, the North American Electric Reliability Corporation ("NERC") and its regional affiliates, including the Western Electric Coordinating Council ("WECC"), have the authority to establish and enforce mandatory electric reliability standards to provide for the reliable operation of the bulk electric system. The reliability standards include requirements related to the cybersecurity of systems that could affect the reliable operation of the grid.

NCPA and some its members are required to comply with the applicable reliability standards and are potentially subject to penalties if they are found to have violated any of those standards. Violations that pose minimal risk to the bulk electric system may be resolved without any financial penalties, while violations that pose moderate or serious risk may result in significant penalties.

While the penalties for violations of market manipulation rules or reliability standards can be quite serious, these risks can be mitigated by strong compliance programs, and NCPA has taken proactive measures to assure that it has such compliance programs in place.

Regulatory Actions Under the Clean Air Act. The United States Environmental Protection Agency (the “EPA”) regulates GHG emissions under existing law by imposing monitoring and reporting requirements, and through its permitting programs. Like other air pollutants, GHGs are regulated under the Clean Air Act through the Prevention of Significant Deterioration (“PSD”) Permit Program and the Title V Permit Program. A PSD permit is required before commencement of construction of new major stationary sources or major modifications of a major stationary source and requires best available control technologies (“BACT”) to control emissions at a facility. Title V permits are operating permits for major sources that consolidate all Clean Air Act requirements (arising, for example, under the Acid Rain, New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, and/or PSD programs) into a single document and the permit process provides for review of the documents by the EPA, state agencies and the public. GHGs from major natural gas-fired facilities are regulated under both permitting programs through performance standards imposing efficiency and emissions standards.

On October 23, 2015, the EPA published the Clean Power Plan and final regulations for (1) carbon pollution standards for new, modified, and reconstructed power plants, and (2) carbon pollution emission guidelines for existing electric generating units (“EGUs”). The total national emissions reduction goal under the Clean Power Plan targets an average of a 32 percent reduction from 2005 levels by 2030, with incremental interim goals for the years from 2022 through 2029. The Clean Power Plan allows states multiple options for measuring reductions and establishes different reduction goals depending upon the regulatory program set forth in the state plan.

The Clean Power Plan is being challenged in the United States Circuit Court of Appeals for the District of Columbia. The United States Supreme Court stayed implementation of the Clean Power Plan on February 9, 2016 for a period of time until the D.C. Circuit renders a decision and the Supreme Court concludes any proceedings brought before it. Due to the stay, states were not required to submit initial plans by the original September 2016 deadline. CARB, however, on July 27, 2017, adopted a compliance program designed to meet the requirements of the Clean Power Plan, relying in substantial part on existing greenhouse gas mitigation and cap-and-trade programs. The D.C. Circuit has continued to hold the case challenging the Clean Power Plan in abeyance and has been requiring the EPA to submit 30-day status updates.

On October 16, 2017, the Federal Register published the EPA’s proposal to repeal the Clean Power Plan, under the premise that it exceeds EPA’s statutory authority under Section 111 of the Clean Air Act.

On December 28, 2017, an Advance Notice of Proposed Rulemaking was published in the Federal Register to consider proposing a new GHG emission limit rule from existing EGUs. Under the new version of the proposed rule, the EPA will have to determine whether to set a common efficiency standard for the coal fleet or write guidance for states to set their own standards for individual plants based on age and technology. On August 31, 2018, the Federal Register published a Proposed Rule issued by the EPA (also known as the “Affordable Clean Energy” rule) which would: (i) replace the Clean Power Plan with revised emissions guidelines that inform the development, submittal, and implementation of state plans to reduce GHG emissions from fossil fuel steam EGUs, primarily coal-fired plants; (ii) implement new regulations that provide direction to both the EPA and the states on the implementation of emission guidelines; and (iii) implement revisions to the New Source Review (a federal Clean Air Act preconstruction permitting program for new and modified stationary sources) for EGUs, which would apply to all EGUs subject to New Source Review regulations, not just coal-fired EGUs, and would apply to all regulated pollutants, not just GHGs.

Ongoing Environmental Regulation. Electric utilities are subject to continuing environmental regulation. Federal, State and local standards and procedures which regulate the environmental impact of electric utilities are subject to change. These changes may arise from continuing legislative, regulatory and judicial action regarding such standards and procedures. Consequently, there is no assurance that any facilities or projects of NCPA or a Project Participant will remain subject to the laws and regulations currently in effect, will always be in compliance with future laws and regulations or will always be able to obtain all required operating permits. In addition, the election of new administrations, including the President of the United States, could impact substantially the current environmental standards and regulations and other matters described herein. An inability to comply with environmental standards could result in, for example, additional capital expenditures, reduced operating levels or the shutdown of individual units not in compliance. In addition, increased environmental laws and regulations may create certain barriers to new facility development, may require modification of existing facilities and may result in additional costs for affected resources.

Changing Laws and Requirements Generally

On both the State and federal levels, legislation is introduced frequently addressing domestic energy policies and various environmental matters and impacts relating to energy, including the generation of energy using conventional and unconventional technologies. Issues raised in recent legislative proposals have included implementation of energy efficiency and renewable energy standards, addressing transmission planning, siting and cost allocation to support the construction of renewable energy facilities, cybersecurity legislation that would allow FERC to issue interim measures to protect critical electric infrastructure, a federal cap-and-trade program to reduce GHG emissions, and renewable energy incentives that could provide grants and credits to municipal utilities to invest in renewable energy infrastructure. Congress has also considered other bills relating to energy supplies and development (such as expedited permitting for natural gas drilling projects, reducing regulatory burdens, climate change and water quality).

Neither NCPA nor any Project Participant is able to predict at this time whether any of these or other legislative proposals will be enacted into law and, if so, the impact they may have on the operations and finances of such entities or on the electric utility industry in general.

PG&E Bankruptcy

The following statements in this section regarding PG&E's financial condition, potential wildfire liabilities, and its actions and developments in connection with PG&E's voluntary bankruptcy filing have been obtained from public sources that NCPA believes to be reliable, but such statements have not been independently verified by NCPA and NCPA assumes no responsibility for the accuracy or completeness thereof.

On January 14, 2019, PG&E and its parent company, PG&E Corporation, announced their intention to file, on or about January 29, 2019, for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code (the "Bankruptcy Code"). On January 29, 2019, PG&E and PG&E Corporation filed for bankruptcy protection under Chapter 11 of the Bankruptcy Code. A Chapter 11 case under the Bankruptcy Code is utilized to accomplish either a restructuring and/or liquidation of businesses.

In its bankruptcy filings, PG&E indicated that its voluntary bankruptcy filing was initiated to address extraordinary financial challenges. These are largely attributed to its potential liabilities associated with a number of wildfires which occurred in Northern California in 2017 and 2018. In its Form 8-K filing with the Securities and Exchange Commission reporting its intent to file voluntary bankruptcy (the "PG&E SEC filing") and its subsequent bankruptcy filings, PG&E estimated if it were found liable for certain or all of the costs, expenses and other losses with respect to the 2017 and 2018 Northern California wildfires, the amount of such liability (exclusive of potential putative damages, fines

and penalties or damages related to future claims) could exceed \$30 billion. SB 901, which was enacted by the California legislature in September 2018, addressed a portion of the liabilities PG&E faced in connection with the 2017 wildfires. That legislation, however, expressly excluded any similar relief for wildfires occurring in 2018. On January 24, 2019, Cal Fire released its findings on the cause of the 2017 Sonoma County Tubbs Fire, one of the 2017 wildfires, determining that such fire had been caused by a private electrical system adjacent to a home, not by equipment operated by PG&E. In its filings, PG&E did not specifically identify the proportion of its stated \$30 billion potential wildfire liability forecast that was attributable to the 2017 Tubbs fire. Subsequently, on February 28, 2019, PG&E Corporation issued a press release stating that it had provided an update on the expected financial impact of the 2018 Camp Fire and the 2017 Northern California wildfires as part of the announcement of its full-year and fourth-quarter 2018 financial results. In its press release, PG&E stated that although the cause of the 2018 Camp Fire is still under investigation, based on the information currently known to the company and reported to the CPUC and other agencies, it believes it is probable that PG&E's equipment will be determined to be an ignition point of the 2018 Camp Fire. PG&E Corporation further indicated that, based on the underlying facts, it was including a \$10.5 billion pre-tax charge related to third-party claims in connection with the 2018 Camp Fire in its full-year and fourth-quarter 2018 financial results. PG&E also stated that it was recording a new \$1.0 billion pre-tax charge related to the 2017 Northern California Atlas and Cascade fires. PG&E indicated that the company had taken a total of \$14.0 billion in pre-tax charges related to the 2018 Camp Fire and the 2017 Northern California wildfires to date, and that such charges represent a portion of its previously announced estimate of potential wildfire liabilities, which it estimated (as noted above) could exceed more than \$30 billion. See also “– State Legislation and Regulatory Proceedings – *Legislation Relating to Wildfires; Related Risks*” above.

NCPA is a party to a number of interconnection agreements with PG&E that provide the terms and conditions for connecting NCPA resources and member loads to the CAISO-controlled grid or PG&E's wholesale transmission system. Each of NCPA's generating facilities, including the geothermal, hydroelectric and gas-fired resources, are interconnected within the CAISO Balancing Authority Area through PG&E's transmission system. The geothermal facilities also use rights of access to a transmission line (the co-tenancy line) wherein PG&E is the majority owner of the transmission line. In addition, NCPA receives all of the natural gas fuel supply required to operate its Lodi Energy Center Project, Combustion Turbine Project Number One and Capital Facilities Project, Unit One through PG&E's natural gas pipeline system. See “THE HYDROELECTRIC PROJECT” and “OTHER NCPA PROJECTS.” The electric systems of the Project Participants, but for Roseville, are interconnected to the PG&E transmission system (including through the CAISO controlled grid), and Santa Clara and Roseville also receive fuel supply for their gas-fired generation resources through PG&E's natural gas pipeline system. See also “APPENDIX A – SELECTED INFORMATION RELATING TO THE SIGNIFICANT SHARE PROJECT PARTICIPANTS” for information regarding the Significant Share Project Participants' electric systems and power and fuel resources. NCPA has no long-term contracts currently in place for the purchase of energy, energy-related commodities, or natural gas from PG&E, and NCPA currently does not have any accounts receivable due from PG&E in connection with wholesale market activities. NCPA does expect to participate in the PG&E bankruptcy proceedings in order to protect its interests in connection with claims related to certain refunds and settlement amounts to be ordered or owed from PG&E in FERC proceedings. See “LITIGATION – PG&E Bankruptcy Proceeding.”

PG&E requested approval from the bankruptcy court to continue operations of both its electric and gas systems. In its SEC filing, PG&E stated that it expected to operate in the ordinary course of business following the Chapter 11 filing, including providing uninterrupted electric and natural gas service to customers. In its bankruptcy filings, PG&E indicated that it has obtained approximately \$5.5 billion in secured debtor-in-possession financing (“DIP Financing”) from several financial institutions that would provide liquidity to fund its operations during the Chapter 11 process. In connection with its Chapter 11 filing, PG&E filed several “first-day” motions seeking approval of both use of the DIP Financing as well as other relief in order to provide PG&E with the ability to continue operations and

payment in the ordinary course, including authority to (a) continue existing customer programs, (b) pay the pre-petition claims of certain critical vendors and suppliers and (c) pay the pre-petition claims of natural gas and electricity exchange operators, *i.e.*, CAISO and ICE NGX (a Canada-based exchange that provides electronic trading, central counterparty clearing and data services to the North American natural gas and electricity markets), and allow the continuation of setoffs and netting with the exchanges and the provision of additional collateral. On January 31, 2019, the Bankruptcy Court approved, on either an interim or final basis, PG&E's requested "first-day" relief, including interim approval for the DIP financing permitting access to \$1.5 billion of the aggregate \$5.5 billion of committed financing. On March 27, 2019, PG&E received final approval from the Bankruptcy Court to access the full \$5.5 billion in DIP financing. To date, neither NCPA nor the Project Participants have experienced any operational disruptions as a result of the PG&E bankruptcy filing.

Although it is too early to assess, PG&E's bankruptcy could have broader effects on the electric markets generally. Subject to Bankruptcy Court approval, Chapter 11 debtors have the power to assume or reject contractual arrangements. Chapter 11 debtors may seek to reject contracts that are uneconomic or otherwise burdensome to the debtor. In the event PG&E were to seek to reject some power purchase agreements, and if the court orders this, there may be further market impacts.

In addition, it is possible that one or more other entities may ultimately assume or acquire all or a portion of PG&E's operations and activities in the future. In December 2018, the CPUC issued a Scoping Memo and Ruling initiating a second phase of an ongoing investigation proceeding (I.15-08-019), in which it indicated that it will examine PG&E's and PG&E Corporation's current corporate governance, structure, and operations to determine if the utility is positioned to provide safe electrical and gas service, and will review alternatives to the current management and operational structures of providing electric and gas service in Northern California. Further, in its SEC filing, PG&E stated that it expects that the Chapter 11 case will, among other things, allow it to work with regulators and policymakers to determine the most effective way for customers to receive natural gas and electric service, and that one of the factors considered by its board of directors in determining to seek bankruptcy relief is the opportunity that such proceedings will provide to maximize the value of PG&E's assets and businesses, including through the possible sale or other disposition of such assets and businesses.

There are a number of uncertainties surrounding the PG&E bankruptcy and the proceedings could continue for many months and potentially a number of years. As a result, NCPA and the Project Participants are unable to predict the full effects of the PG&E bankruptcy on NCPA, any of the Project Participants or the California electric markets at this time. NCPA will continue to monitor the PG&E bankruptcy proceedings to assess any developments that may impact its interests.

CAISO Markets

General. Any electricity sales or purchases NCPA makes in the wholesale energy markets operated by the CAISO are subject to the CAISO tariff, which is a FERC-jurisdictional tariff. CAISO's tariff includes rules governing how sellers may bid electricity (*i.e.*, offer for sale) into the energy markets and rules governing market power mitigation of sellers. CAISO regularly proposes changes to its tariff, subject to FERC approval. Additionally, FERC can, and does, order changes to CAISO's tariff if FERC (on its own initiative or prompted by a complaint) determines that CAISO's tariff is unjust, unreasonable, or unduly discriminatory. Such regulatory changes can impact prices for electricity and capacity.

During portions of 2000 and 2001, shortly after CAISO's energy markets were first established, wholesale electricity prices were highly volatile and subject to market manipulation. That market dysfunction resulted in deterioration of credit ratings of many market participants and the first bankruptcy of PG&E. CAISO's energy markets have since been redesigned, and Congress has established mechanisms for policing wholesale markets. Price volatility has since decreased compared to the 2000-

2001 period. See also, however, “– State Legislation and Regulatory Proceedings – Impact of State Developments on NCPA and the Project Participants.”

CAISO Resource Adequacy Availability Incentives. Resources that load-serving entities designate as providing Resource Adequacy capacity are subject to obligations to offer energy to the CAISO markets in designated hours and, in certain circumstances, to provide substitute capacity if the resource is unavailable. CAISO’s Resource Adequacy Availability Incentive Mechanism (“RAAIM”) assesses a non-availability charge on resources that fall below 94.5% of their must-offer obligation and makes incentive payments to resources that exceed 98.5% of their must-offer obligation. Some of NCPA’s resources do provide Resource Adequacy capacity and are subject to the RAAIM. CAISO is currently considering changes to the program, and the final result is yet to be determined.

CAISO Market Initiatives. The CAISO markets are subject to continued change in response to FERC orders, the increased integration of intermittent renewable resources, changing environmental constraints, the ongoing efforts to combat market manipulation and evolving reliability requirements. CAISO Tariff changes related to these and other issues are currently under discussion in CAISO stakeholder processes and in ongoing FERC proceedings. In most cases, these proposals are not sufficiently final in order to determine their likely impact on NCPA or the Project Participants. However, the following issues and proposed CAISO operational and market changes may have significant impacts on NCPA, the Project Participants or electric utilities generally. NCPA will continue to monitor the various initiatives proposed by the CAISO and participate in its stakeholder processes to ensure that its interests are protected.

Increased Integration of Renewables. As part of the effort to integrate increased levels of intermittent renewable resources into the grid, the CAISO has proposed an array of changes to existing markets and to the resource adequacy structure that assures that sufficient resources are available to the markets. These proposals could affect the value of energy sold and purchases in the wholesale markets.

Resource Adequacy Requirements. Resource Adequacy requirements apply to NCPA and its members, including the Project Participants, to ensure that market participants have contracted for sufficient amounts of the right types of capacity to be available in the markets. To the extent that a load serving entity (“LSE”) fails to procure sufficient capacity resources to meet its loads, it is subject to payment of CAISO procurement costs of replacement capacity. To the extent that a shortfall cannot be attributed to a specific LSE, the costs will be spread as part of market uplift charges. These risks apply in the same manner to all LSEs. Due to the increased integration of renewables, discussed above, the CAISO is contemplating what could be significant changes to the Resource Adequacy framework, with the potential for impacts on market participant costs. It is still too early to assess the potential impacts on NCPA. Although it does not appear that CAISO is considering proposing a centralized capacity market at this time, proposals from others are occasionally made. The CPUC has ongoing docket that could also result in changes to the Resource Adequacy and CAISO’s markets. However, the details of such changes remain to be established.

Transmission Access Charge Review. The CAISO has undertaken a review of its Transmission Access Charge, with a view to potentially changing the methodology used for allocating transmission costs. Although the current proposal should not adversely impact NCPA or its members, any change of this nature raises concerns and NCPA is unable to predict the outcome of the tariff revisions process.

Extension of Day Ahead Markets to Energy Imbalance Market. The CAISO began financially binding operation of the western Energy Imbalance Market (“EIM”) on November 1, 2014. An EIM is a voluntary market that provides a sub-hourly economic dispatch of participating resources for balancing supply and demand every five minutes. CAISO has announced its intention to propose changes to the EIM structure that would extend the CAISO’s day ahead market into the EIM, rather than leaving it as

only a real time market. While these proposals have not yet been published, much less analyzed, such a change has the impact to affect prices paid in the CAISO markets.

Other Factors

The electric utility industry in general has been, or in the future may be, affected by a number of other factors which could impact the financial condition and competitiveness of many electric utilities and the level of utilization of generating and transmission facilities. In addition to the factors discussed above, such factors include, among others, (a) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements other than those described above (including those affecting nuclear power plants or potential new energy storage requirements), (b) changes resulting from conservation and demand-side management programs on the timing and use of electric energy, (c) effects on the integration and reliability of power supply from the increased usage of renewables, (d) changes resulting from a national energy policy, (e) effects of competition from other electric utilities (including increased competition resulting from a movement to allow direct access or from mergers, acquisitions, and “strategic alliances” of competing electric and natural gas utilities and from competitors transmitting less expensive electricity from much greater distances over an interconnected system) and new methods of, and new facilities for, producing low-cost electricity, (f) the repeal of certain federal statutes that would have the effect of increasing the competitiveness of many IOUs, (g) increased competition from independent power producers and marketers, brokers and federal power marketing agencies, (h) “self-generation” or “distributed generation” (such as microturbines, fuel cells and solar installations) by industrial and commercial customers and others, (i) issues relating to the ability to issue tax-exempt obligations, including severe restrictions on the ability to sell to nongovernmental entities electricity from generation projects and transmission service from transmission line projects financed with outstanding tax-exempt obligations, (j) effects of inflation on the operating and maintenance costs of an electric utility and its facilities, (k) changes from projected future load requirements, (l) increases in costs and uncertain availability of capital, (m) shifts in the availability and relative costs of different fuels (including the cost of natural gas and nuclear fuel), (n) sudden and dramatic increases in the price of energy purchased on the open market that may occur in times of high peak demand in an area of the country experiencing such high peak demand, such as has occurred in the past in California, (o) issues relating to risk management procedures and practices with respect to, among other things, the purchase and sale of natural gas, energy and transmission capacity, (p) other legislative changes, voter initiatives, referenda and statewide propositions, (q) effects of the changes in the economy, population and demand of customers within a utility’s service area, (r) effects of possible manipulation of the electric markets, (s) acts of terrorism or cyber-terrorism impacting a utility and/or significant load customers, (t) changes to the climate; (u) natural disasters or other physical calamities, including, but not limited to, earthquakes, droughts, severe weather, floods and wildfires, and potential liabilities of electric utilities in connection therewith, and (v) adverse impacts to the market for insurance relating to recent wildfires and other calamities, leading to higher costs or prohibitively expensive coverage, or limited or unavailability of coverage for certain types of risk. Any of these factors (as well as other factors) could have an adverse effect on the financial condition of any given electric utility and likely will affect individual utilities in different ways.

LITIGATION

There is no controversy or litigation of any nature now pending or threatened restraining or enjoining the issuance, sale, execution or remarketing of the 2008 Bonds, or in any way contesting or affecting the validity of the 2008 Bonds or any proceedings of NCPA taken with respect to the issuance, sale or remarketing thereof.

Upon the basis of information presently available, NCPA and its General Counsel believe that there is no litigation pending or threatened against NCPA which will materially adversely affect the Project or the respective sources of payment for the 2008 Bonds.

California Energy Market Dysfunction, Refund Dispute and Related Litigation

Following the 1998 operation of the CAISO and the California Power Exchange (the “PX”), the deregulated electricity and natural gas markets in California became increasingly dysfunctional, with very high prices in 2000-2001, resulting in the eventual bankruptcy of the PX, PG&E (and others) and a number of orders from FERC. The IOUs (PG&E, Southern California Edison Company (“Edison”) and San Diego Gas & Electric Company (“SDG&E”)) and the State of California and the CPUC have been pursuing claims for refunds against all sellers into the market, including NCPA and other power-producing municipally owned utilities (“MOUs”), including Santa Clara.

Those claims for refunds against varying groups of sellers have been pursued in a number of *fora* since early Fall, 2000, and have been through numerous FERC proceedings, State and Federal court decisions, and the U.S. Supreme Court. Some of those claims are still being pursued both at FERC and in the Courts of Appeal. While NCPA considered the claims against it to be lacking in legal merit, NCPA entered into a settlement with the plaintiffs which provides the terms of a final resolution of all of these claims and of the bankruptcy claims held by NCPA against PG&E and the PX. The settlement agreement was approved by FERC on April 29, 2010. That approval by FERC was the last regulatory step necessary to resolve these disputes between those parties in their entirety, as well as a separate lawsuit filed by the State of California. The state court proceeding against NCPA was dismissed with prejudice on May 20, 2010.

The proceedings at FERC and in the Court of Appeals remain ongoing, but the remaining parties to those proceedings have not asserted any claims against NCPA. NCPA continues to monitor the proceedings to protect its interests.

FERC and CAISO Proceedings: Market Redesign

Most of the matters being contested at FERC or being discussed in CAISO stakeholder processes involving NCPA or the Project Participants concern the current operation or potential changes to the CAISO market. For a discussion of potential changes in the CAISO market, see “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – CAISO Markets.”

PG&E Bankruptcy Proceeding

NCPA expects to participate in the PG&E bankruptcy litigation (United States Bankruptcy Court for the Northern District of California Case Nos. 19-30088 (DM) and 19-30089 (DM)) as a creditor. NCPA does not believe it has contracts that PG&E will seek to reject, but it does have claims on sums related to refunds to be ordered by FERC in ongoing rate case proceedings and sums owed in settlement of other FERC litigation.

Other Proceedings

NCPA is involved in various other state court proceedings incidental to its operations. Based on its review of those proceedings with its General Counsel, NCPA believes that the ultimate aggregate liability, if any, resulting from those proceedings will not have a material adverse effect on its financial position.

RATINGS

S&P Global Ratings (“S&P”) and Fitch Ratings (“Fitch”) are expected to assign the ratings of “____” and “____”, respectively, to the 2008 Bonds. [The long-term “____” and “____” ratings, respectively, are based jointly on the underlying rating of the 2008 Bonds and the Letter of Credit issued by the Bank for the benefit of the 2008 Bonds]. The short-term “____” and “____” ratings assigned to the 2008 Bonds by S&P’s and Fitch, respectively, are based solely on the support provided by the Letter of Credit. See “THE LETTER OF CREDIT AND THE REIMBURSEMENT AGREEMENT.” Such ratings reflect only the views of such organizations and an explanation of the significance of such ratings may be obtained only from the applicable rating agency. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that either rating will continue for any given period or that it will not be revised downward or withdrawn entirely by the respective rating agency, if in the judgment of such rating agency, circumstances so warrant. NCPA undertakes no responsibility to oppose any such revision or withdrawal. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the 2008 Bonds.

MUNICIPAL ADVISOR

PFM Financial Advisors LLC (the “Municipal Advisor”) has assisted NCPA with various matters relating to the replacement of the letter of credit for and the remarketing of the 2008 Bonds. The Municipal Advisor is a financial advisory firm and is not engaged in the business of underwriting or distributing municipal securities or other public securities. The Municipal Advisor assumes no responsibility for the accuracy, completeness or fairness of this Remarketing Memorandum.

TAX MATTERS

Original Opinion

On April 2, 2008, the date of original issuance and delivery of the 2008 Bonds, Orrick, Herrington & Sutcliffe LLP, bond counsel to NCPA in respect of such issuance (“Original Bond Counsel”), rendered its opinion to the effect that, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2008 Bonds was excluded from gross income of the owners thereof for federal income tax purposes pursuant to section 103 of the Internal Revenue Code of 1986 (the “Code”). It was the further opinion of Original Bond Counsel that interest on the 2008 Bonds was exempt from personal income taxes of the State of California. A complete copy of the opinion of Original Bond Counsel delivered in connection with the original issuance of the 2008 Bonds is attached as APPENDIX E. The opinion of Original Bond Counsel has not been updated in connection with the remarketing of the 2008 Bonds or as of the date of this Remarketing Memorandum.

In its opinion, Original Bond Counsel noted that the Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2008 Bonds. In connection with the issuance of the 2008 Bonds, NCPA made certain representations and agreements and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2008 Bonds would be excluded from gross income for federal income tax purposes. Original Bond Counsel noted that inaccuracy of those representations or failure to comply or to have complied with those covenants may result in interest on the 2008 Bonds being included in gross income federal income tax purposes, possibly from the date of original issuance of the 2008 Bonds. The opinion of Original Bond Counsel assumed the accuracy of such representations and compliance with such covenants and agreements. Original Bond Counsel did not undertake to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not

occurring), or any other matters coming to Original Bond Counsel's attention after the date of issuance of the 2008 Bonds has adversely affected or may in the future adversely affect the value of, or the tax status of interest on, the 2008 Bonds. Accordingly, the opinion of Original Bond Counsel was not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Original Bond Counsel was of the opinion that interest on the 2008 Bonds is excluded from gross income for federal income tax purposes and that interest on the 2008 Bonds is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of interest on, the 2008 Bonds may otherwise affect a Beneficial Owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner's other items of income or deduction. Original Bond Counsel expressed no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2008 Bonds to be subject, directly or indirectly, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals, clarification of the Code or court decisions may also affect the market price for, or marketability of, the 2008 Bonds. Prospective purchasers of the 2008 Bonds should consult their own tax advisors regarding any pending or proposed federal or state tax legislation, regulations or litigation, as to which Original Bond Counsel expressed no opinion.

A copy of the opinion of Original Bond Counsel is attached hereto as APPENDIX E. The opinion of Original Bond Counsel has not been updated subsequent to the date of the original issuance of the 2008 Bonds or as of the date of this Remarketing Memorandum.

Opinion in Connection with the Delivery of the Letter of Credit

In connection with the delivery of the Letter of Credit as an alternate Credit Facility and alternate Liquidity Facility for the 2008 Bonds, Norton Rose Fulbright US LLP, Bond Counsel to NCPA in connection with the remarketing of the 2008 Bonds ("Bond Counsel"), will render an opinion to the effect that under existing law the delivery of the Letter of Credit as an alternate Credit Facility and alternate Liquidity Facility for the 2008 Bonds will not, in and of itself, adversely affect any exclusion of interest on the 2008 Bonds from the gross income of the owners thereof for federal income tax purposes. Except as described in this paragraph, Bond Counsel will express no opinion as to any federal, state or local tax consequences of the purchase, ownership or disposition of the 2008 Bonds, including any opinion relating to the status of the 2008 Bonds as obligations described in section 103 of the Code. The proposed form of opinion of Special Tax Counsel is attached as APPENDIX F hereto.

CERTAIN LEGAL MATTERS

Norton Rose Fulbright US LLP, Los Angeles, California, is serving as Bond Counsel to NCPA in connection with the remarketing of the 2008 Bonds. Certain legal matters will also be passed upon for NCPA by Jane E. Luckhardt, Esq., General Counsel to NCPA, and for the Bank by Chapman and Cutler LLP, Chicago, Illinois. Norton Rose Fulbright US LLP is also serving as disclosure counsel to NCPA in connection with the remarketing of the 2008 Bonds.

INDEPENDENT AUDITORS

The combined financial statements of Northern California Power Agency and Associated Power Corporations as of and for the years ended June 30, 2018 and 2017 have been audited by Baker Tilly Virchow Krause, LLP, independent auditors, as stated in their report appearing therein. Baker Tilly Virchow Krause, LLP has not been engaged to perform and has not performed, since the date of its report

APPENDIX A

**SELECTED INFORMATION RELATING TO THE
SIGNIFICANT SHARE PROJECT PARTICIPANTS**

The following information has been supplied by the respective Project Participants, and includes selected historical operating data and data taken from their electric system balance sheets. Neither NCPA nor any Project Participant makes any representation as to the accuracy or completeness of this information with respect to any other Project Participants.

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CITY OF ALAMEDA

Introduction

The City of Alameda (“Alameda”) is a charter city in the State of California. Alameda is an island community of 22.8 square miles located across the bay from San Francisco and to the west of the City of Oakland. Alameda was incorporated in 1854.

Alameda provides electric utility service through its Department of Public Utilities – Bureau of Electricity. The Alameda Bureau of Electricity began operation in 1887. The Bureau of Electricity did business as “Alameda Power & Telecom” beginning in 1999. On January 26, 2009, the name was changed to “Alameda Municipal Power.” The Alameda electric utility was the first municipal electric utility in California and is one of the oldest in the nation.

Alameda Municipal Power (“AMP”) serves the entire area of the City of Alameda and has about 86 pole miles of overhead distribution lines and 179 circuit miles of underground distribution lines, 6.8 pole miles of overhead transmission lines, 1.9 circuit miles of underground transmission lines and 6,415 streetlights. During the fiscal year 2017-18, AMP served an average of 34,790 customers, comprised of an average of 30,625 residential customers, an average of 3,778 commercial and industrial customers and an average of 387 public authority and other customers, with a peak demand of approximately 59.6 MW.

AMP joined the Northern California Power Agency (“NCPA”) in 1968, is a participant in most NCPA projects, and has procured other power supply resources independently. In addition, NCPA has developed electric scheduling, dispatch and transmission capabilities that are utilized in the provision of AMP’s electric utility services. All of AMP’s rights to electric energy, capacity, environmental attributes and transmission are scheduled by NCPA and AMP participates in the NCPA power pool. See “NORTHERN CALIFORNIA POWER AGENCY – NCPA Power Pool” in the front part of this Remarketing Memorandum.

From June 2001 until November 21, 2008, AMP also provided cable television and internet services through its telecommunications system. On November 18, 2008, the City Council of the City of Alameda unanimously authorized the sale of the telecommunications business line effective November 21, 2008. See “– Condensed Operating Results and Selected Balance Sheet Information – Interfund Transfers” below.

Only the revenues of AMP’s electric system will be available to pay amounts owed by Alameda under the Third Phase Agreement.

AMP is under the policy control of the Alameda Public Utilities Board, in accordance with the Alameda City Charter. The Alameda Public Utilities Board consists of four commissioners appointed by the Mayor with concurrence of the City Council, and the City Manager of Alameda (as an ex-officio member), who may not hold any office on the Board.

Pursuant to the Alameda City Charter, the Alameda Public Utilities Board has the power to control and manage the electric system, including the power to set rates for the services of the electric system. The Alameda Public Utilities Board also establishes goals and policies, approves major purchases and creates the framework for local control of the utility.

AMP’s main office is located at 2000 Grand Street, Alameda, California 94501, (510) 748-3900. For more information about AMP and its electric system, contact Nicolas Procos, General Manager at the above address and telephone number. A copy of the most recent comprehensive annual financial report of

AMP (the “Annual Report”) is available on AMP’s website at <http://www.alamedamp.com> and on the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access system at <http://emma.msrb.org/>. The Annual Report is incorporated herein by this reference. However, the information presented on such website or referenced therein other than the Annual Report is not part of this Remarketing Memorandum and is not incorporated by reference herein.

Power Supply Resources

The following table sets forth information concerning AMP’s power supply resources and the energy supplied by each during the fiscal year ended June 30, 2018.

**CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER
POWER SUPPLY RESOURCES
For the Fiscal Year Ended June 30, 2018**

Source	Capacity Available (MW) ⁽¹⁾	Actual Energy (GWh)	% of Total Energy
Purchased Power ⁽²⁾ :			
Western Hydroelectric	14.0	36.6	10.93%
Landfill Gas ⁽⁴⁾	12.2	41.1	12.26
High Winds	3.1	19.5	5.82
Silicon Valley Power	--	14.2	4.23
NCPA			
Hydroelectric Project	25.3	49.2	14.68
Combustion Turbine Project No. 1 & 2 ⁽³⁾	24.9	5.0	1.49
Geothermal Plant 1 ⁽⁴⁾	7.6	--	0.00
Geothermal Plant 2 ⁽⁴⁾	1.3	--	0.00
Graeagle	--	2.8	0.84
Other Purchases (Net)	--	183.3	54.74
Total Capacity and Total Purchased Energy	79.5	351.6	105.0%
Less Line Losses	N/A	(16.7)	(5.00)
AMP’s Capacity and Retail Sales Requirements	63.7	334.9	100.00%

(1) Non-coincident capacity available.

(2) Entitlements, firm allocations and contract amounts.

(3) Combustion Turbine Project No. 2 is also referred to as the NCPA Capital Facilities Project in the front part of this Remarketing Memorandum.

(4) AMP sold its share of eligible renewable energy generated by the NCPA Geothermal Project and one of its landfill power purchase agreements. See “– Energy Efficiency and Conservation. Renewable Resources.

Source: Alameda Municipal Power.

In the fiscal year ended June 30, 2018, AMP’s average cost of power for 334.9 GWh of energy sales was 9.41 cents per kWh, and its average cost of power for the 351.6 GWh purchased was 8.96 cents per kWh.

Purchased Power

Western. AMP has power purchase agreements (“PPAs”) with the Western Area Power Administration (“Western”) that continue through December 31, 2024. AMP’s Western power is assigned to NCPA for scheduling and delivery to AMP. Power purchased under these agreements is generated by the Central Valley Project (“CVP”), a series of federal hydroelectric facilities in Northern California operated by the United States Bureau of Reclamation.

On October 5, 2000, AMP signed a 20-year Base Resource agreement with Western with initial service beginning January 1, 2005. Service under the Western contract will continue through December 31, 2024, with AMP receiving a “slice of the system” allocation from Western. AMP’s allocation is currently 1.08075% of the CVP output. Power provided to AMP under the Western contract is on a take-or-pay basis; AMP is obligated to pay its share of Western costs whether or not it receives any power.

Other Purchases. AMP has also entered into certain other PPAs: (1) a PPA with Avangrid Renewables LLC (formerly Iberdrola Renewables, Inc.) for power supplied from the High Winds Project in Solano County, California under which AMP receives 6.17% (approximately 10 MW of the 162 MW project) until June 30, 2028; (2) five long-term PPAs for power supplied by multiple existing generating facilities utilizing combustible gaseous emissions from landfills located in or near the San Francisco Bay area, under which AMP has received approximately 3.2 MW of baseload power from two facilities since early 2006, approximately 7.1 MW of baseload output from two additional facilities since 2009, and approximately 1.9 MW of baseload power from a fifth facility since 2013; and (3) a PPA with the City of Santa Clara (Silicon Valley Power) under which AMP receives an additional 10 MW of renewable energy from Silicon Valley Power during the months of January, February, October, November, and December beginning January 2018 through December 2027. In addition, AMP makes short-term market purchases as necessary to meet its native load requirements.

Generally, AMP has entered into power purchase agreements solely or primarily for use within its own system.

Joint Powers Agency Resources

NCPA. AMP does not independently own any generation assets but, in addition to power purchased from Western and others, AMP is a participant in most NCPA projects. AMP has purchased from NCPA: a 10.00% entitlement share in the NCPA Hydroelectric Project; a 21.820% entitlement share in the NCPA Combustion Turbine Project Number One; a 19.00% entitlement share in the NCPA Capital Facilities Project (also known as Combustion Turbine Project Number Two); and a 16.8825% entitlement share in the NCPA Geothermal Project. AMP additionally participates in the NCPA Geysers Transmission Project, in which it has a 30.36% entitlement share. For a description of such resources, see “THE HYDROELECTRIC PROJECT” and “OTHER NCPA PROJECTS” in the front part of this Remarketing Memorandum. For each of these NCPA projects in which AMP participates, AMP is obligated to pay, on an unconditional take-or-pay basis, as an operation and maintenance cost of its electric system, its entitlement share of the debt service on NCPA bonds issued for the project, as well as its share of the operation and maintenance expenses of the project. See also “– Indebtedness; Joint Powers Agency Obligations” below.

Through NCPA, AMP also participates in certain PPAs entered into by NCPA, including a PPA with Henwood Associates, Inc. to purchase 100% of the power produced by the Graeagle Hydroelectric Project, a small 440 kW hydroelectric project (replacing a prior agreement under which AMP received 50% of the project output). The energy source for the facility is hydroelectric and the facility meets the

qualifying facilities requirements established by FERC. The facility output, which varies with hydrological conditions, has averaged about 2,000 MWh per year. Deliveries under the agreement began on February 1, 2010 and will terminate on January 31, 2030. See also “OTHER NCPA PROJECTS – Power Purchase and Natural Gas Contracts” in the front part of this Remarketing Memorandum. Additionally, AMP participates in NCPA’s Market Purchase Program when contracted resources cannot meet load.

TANC California-Oregon Transmission Project. AMP is a member of the Transmission Agency of Northern California (“TANC”) and has executed an agreement (the “TANC Agreement”) for a participation percentage of TANC’s entitlement of the California-Oregon Transmission Project (“COTP”) transfer capability. Pursuant to the TANC Agreement, AMP is obligated to pay 1.23% of TANC’s COTP operating and maintenance expenses and 1.33% of TANC’s COTP debt service (on bonds other than TANC’s 2009 Series A Bonds on which it is obligated for 1.45% of debt service) and is entitled to 1.23% of TANC’s share of COTP transfer capability (approximately 17 MW net of third-party layoffs of TANC) on an unconditional take-or-pay basis. AMP’s share of annual operating and maintenance expenses and debt service for the COTP is approximately \$0.7 million per year. However, Alameda has laid off its COTP entitlement through 2039 as described under “– *COTP Long-Term Layoff*” below. See also “CITY OF SANTA CLARA – Transmission Resources – *TANC California-Oregon Transmission Project*” for a further description of the COTP and the TANC Agreement.

COTP Long-Term Layoff. Due to situational and economic changes in value of power deliveries over the COTP, AMP and six other TANC members laid off their participation shares in the COTP to other TANC members for a period of 25 years with the option to extend for an additional five years upon all parties’ approval. The enabling agreement among the parties became effective on July 1, 2014. The agreement transfers the use and associated rights of AMP’s project participation shares to the receiving parties (the Modesto Irrigation District, the Turlock Irrigation District and Sacramento Municipal Utility District). The receiving parties agree to pay the debt service and operating and maintenance costs associated with those shares and an additional value payment after the debt service is retired. Under the agreement, AMP continues to be a member of TANC and remains ultimately responsible for its allocated share of the costs of the COTP in the event of a default by a receiving party during the term of the agreement.

TANC Tesla–Midway Transmission Service. The southern physical terminus of the COTP is near the Tesla Substation of Pacific Gas & Electric Company (“PG&E”) located near Tracy, California. The COTP is connected to Western’s Tracy and Olinda Substations. PG&E provides TANC and its members with 300 MW of firm bi-directional transmission capacity in its transmission system between its Tesla Substation and its Midway Substation near Buttonwillow, California (the “Tesla-Midway Transmission Service”) under a long-term agreement known as the South of Tesla Principles. See “CITY OF SANTA CLARA – Transmission Resources – *TANC Tesla-Midway Transmission Service*” for a further description of the Tesla-Midway Transmission Service. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – PG&E Bankruptcy” in the front part of this Remarketing Memorandum.

AMP’s share of Tesla-Midway Transmission Service is 6.0 MW. AMP may utilize its full allocation of Tesla–Midway Transmission Service for firm and non-firm power transactions when economic to do so and if available.

Energy Efficiency and Conservation; Renewable Resources

State laws enacted in 2005 and 2006 require publicly-owned utilities (“POUs”), such as AMP, in procuring energy, to first implement all available energy efficiency and demand reduction resources that

are cost-effective, reliable and feasible, and to provide annual reports to customers and to the California Energy Commission (the “CEC”) describing their investment in energy efficiency and demand reduction programs. California Assembly Bill 2021, which became law in 2007, requires investor-owned utilities (“IOUs”) and POU’s to identify energy efficiency potential and establish annual efficiency targets so that the State can meet the goal of reducing total forecasted electricity consumption by 10% over the ten years.

AMP has a full portfolio of public benefits programs, addressing four areas of concentration: low income assistance programs, renewable energy production, advanced electric technology demonstration, and research and development, as well as energy efficiency programs. It has continually funded new renewable resources including geothermal, wind, landfill gas, and hydroelectric generation.

AMP has had energy efficiency programs in place since the 1990s. These energy efficiency programs focus on the unique end-uses in Alameda with its coastal climate, and the resulting lack of air conditioning load. AMP offers energy efficiency programs for all of its customer classes and has established an aggressive target for reducing future consumption by nearly 12% during the next ten years.

California Senate Bill (“SB”) X1-2 requires POU’s to adopt and implement a renewable energy resource procurement plan to achieve specified targets for serving their retail energy loads from California-eligible renewable energy resources, culminating in a target of serving 33% of their loads with California-eligible renewable energy resources by December 31, 2020. State law enacted in 2015, SB 350, increased California’s renewable electricity procurement goal from 33% by 2020 to 50% by 2030 based on Renewables Portfolio Standard (“RPS”) eligible resources. State law enacted in 2018, SB 100, accelerates the State’s RPS target as established by SB 350 from 50% by 2030 to 60% by 2030 and sets a goal of 100% “clean energy” by the year 2045. See “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – *California Renewables Portfolio Standard*” in the front part of this Remarketing Memorandum for more information on SBX1-2, SB 350 and SB 100.

AMP’s renewables portfolio consists of its share of NCPA’s geothermal and hydroelectric projects as well as PPAs for the purchase of landfill gas-to-energy, wind, and additional hydroelectric generation. All of this generation is considered California-eligible renewable generation with the exception of generation from large (>30 MW) hydroelectric facilities, which do not count towards the State’s RPS compliance obligations. SBX1-2 regulations include an RPS target of an average of 20% California-eligible renewable resources used to meet retail sales for Compliance Period 1 (calendar year (“CY”) 2011 through CY 2013) which AMP exceeded with an actual average of 25%. AMP also satisfied the RPS targets for Compliance Period 2 (CY 2014 through CY 2016) by meeting the RPS target of 20% of retail sales in 2014 and 2015, and 25% of retail sales in 2016. AMP does not currently anticipate any difficulty in meeting the Compliance Period 3 RPS targets of 27% for 2017, 29% for 2018, 31% for 2019 and 33% for 2020. AMP’s current portfolio is expected to fulfill its RPS compliance requirements under current law through 2030 and beyond.

In January 2012 and again in January 2015, the Alameda Public Utilities Board adopted a Renewable Energy Sales and Use of Resulting Revenues Policy stating that through 2019, AMP may sell eligible renewable energy not required to comply with the Board approved RPS Policy. AMP subsequently entered into two sales agreements, the first from October 15, 2012 through December 31, 2016 to the California Department of Water Resources (“CDWR”), and a subsequent sale from January 1, 2017 through December 31, 2019 to Shell Energy North America (“Shell”). For both agreements, AMP sold its share of eligible renewable energy generated by NCPA’s geothermal project and generation from one of its landfill gas PPAs. The resulting revenues from these sales are to be used to support initiatives to reduce greenhouse gas (“GHG”) emissions associated with electricity use by AMP’s customers. AMP has established a Board designated reserve in accordance with this policy into which all revenues associated

with these sales are deposited. Through these sales AMP has been able to fund a variety of GHG emissions reductions programs, like energy efficiency, without raising rates.

To comply with California's SB 1305, passed in 1997, AMP must annually disclose the sources of the electricity it sold to customers the previous CY in the CEC's Power Source Disclosure Report, from which a Power Content Label ("PCL") is generated. For the years prior to AMP entering into the CDWR and Shell sales agreements, AMP typically reported mid-sixties percentages of electricity coming from California-eligible renewable resources on the PCL. However, during the sales years, which will end on December 31, 2019, those percentages have been in the low twenties. For example, had the sales not occurred, AMP would have reported 73% for 2017 instead of 21%, and an estimated 88% for 2018 instead of an estimated 32%.

Per Assembly Bill ("AB") 32, the Global Warming Solutions Act, AMP is subject to the California Air Resources Board's ("CARB") cap-and-trade program regulations. Each year CARB distributes freely allocated allowances to AMP, which AMP must allocate to the cap-and-trade auction process. Current Alameda Public Utilities Board policy requires AMP to allocate allowances to each quarterly auction, deposit the proceeds into a designated reserve account and use the proceeds to benefit retail ratepayers consistent with the goals of AB 32. See "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – *GHG Regulations; Cap-and-Trade*" in the front part of this Remarketing Memorandum for more information on AB 32.

Future Power Supply Resources

AMP is currently investigating options to meet future resource requirements in an environmentally beneficial manner including additional renewable resources and energy efficiency savings.

Interconnections, Transmission and Distribution Facilities

AMP's electric system is interconnected with PG&E's system at two PG&E substations. AMP owns facilities for the distribution of electric power within the city limits of Alameda, which includes approximately 8.70 miles of 115 kV power lines, approximately 265.1 miles of 12 kV distribution lines (approximately 68% of which are underground) and eight substations. AMP's electric system experienced approximately 60.17 minutes of outage time per customer in fiscal year 2017-18.

AMP does not own or operate any transmission or generation assets. The service area of AMP, which is coterminous with the municipal boundaries of the City of Alameda, is largely an urban area and has no urban wildland interface. Alameda is located in a geographical area classified by the California Public Utilities Commission Fire Threat Map as a "Tier 1" fire-threat area (*i.e.*, not in an area of elevated or extreme risk from utility-associated wildfires). By resolution, on September 17, 2018, the Alameda Public Utilities Board made a wildfire risk determination pursuant to the requirements of California Senate Bill 1028, and determined that AMP's overhead electrical lines and equipment are located within a geographical area that does not have a significant risk of catastrophic wildfire resulting from AMP's electrical lines and equipment. See also "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – *Legislation Relating to Wildfires; Related Risks*" in the front part of this Remarketing Memorandum.

Rates and Charges

AMP has the exclusive jurisdiction to set electric rates within its service area by action of the Alameda Public Utilities Board. These rates are not subject to review by any state or federal agency.

AMP’s fiscal year 2017-18 average rate per kWh sold for all electric service was 17.70 cents per kWh. The average rate per kWh sold for residential service in fiscal year 2017-18 was 19.19 cents. The average rates for commercial service were 16.67 cents per kWh. AMP’s average rate for municipal and public authority service for fiscal year 2017-18 was 19.13 cents per kWh. In general, the rate adjustment for fiscal year 2017-18 was designed to increase revenue by approximately 1.9 cents per kWh. Currently, AMP management estimates that AMP’s electric rates are approximately 16.9% below those of PG&E on average.

The following table presents a recent history of AMP’s rate changes.

**CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER
ELECTRIC RATE CHANGES**

Date	Percent Change (Average)
July 1, 2018	1.00%
July 1, 2017	5.00
July 1, 2016	5.00
July 1, 2015	4.60
July 1, 2014	2.00

Source: Alameda Municipal Power.

Largest Customers

AMP’s ten largest electric customers in terms of kWh sales for the fiscal year ended June 30, 2018 accounted for 20.54% of total kWh sales and 18.90% of total revenues. The largest customer accounted for 5.23% of total kWh sales and 4.53% of total revenues. The smallest of the ten largest customers accounted for 1.26% of total kWh sales and 1.17 % of revenues.

Customers, Sales, Revenues and Demand

The average numbers of customers, kWh sales, revenues derived from sales by classification of service and peak demand during the five fiscal years 2013-14 through 2017-18, are listed below.

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**CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER
ELECTRIC CUSTOMERS, SALES, REVENUES AND DEMAND**

	Fiscal Years Ended June 30,				
	2014	2015	2016	2017	2018
Number of Customers:					
Residential	30,293	30,307	30,377	30,495	30,625
Commercial	3,786	3,834	3,735	3,764	3,778
Industrial	12	8	8	12	12
Public Authority	363	361	363	362	363
Other	28	15	11	15	12
Total Customers	34,482	34,525	34,494	34,648	34,790
Kilowatt-Hour Sales:					
Residential	131,209,422	125,431,220	125,831,929	126,850,402	124,589,523
Commercial	175,075,476	174,257,771	176,575,883	172,520,353	168,873,305
Industrial	31,951,900	26,587,830	31,490,040	30,127,960	28,321,180
Public Authority	12,537,513	12,801,245	12,375,517	11,428,198	10,723,565
Other	3,138,994	3,124,117	2,546,494	2,838,825	2,518,330
Total kWh sales	353,913,305	342,202,183	348,819,863	343,765,738	335,025,903
Revenues from Sale of Energy:					
Residential	\$18,974,096	\$18,849,656	\$19,869,104	\$21,510,126	\$23,902,788
Commercial	25,554,219	25,660,869	27,071,358	27,177,335	28,500,186
Industrial	4,088,510	3,435,518	4,278,240	4,366,885	4,338,898
Public Authority	1,859,914	2,047,549	1,973,689	1,958,154	1,965,664
Other	660,902	797,198	1,028,631	913,247	793,870
Total Revenues from Sale of Energy	\$51,137,641	\$50,790,790	\$54,221,022	\$55,925,747	\$59,501,406
Peak Demand (kW)	68,100	63,372	64,283	63,738	59,624 ⁽¹⁾

⁽¹⁾ Decline over the five year period primarily reflects increased distributed solar installations and energy efficiency programs implemented by AMP.

Source: Alameda Municipal Power.

Service Area

Population. The City of Alameda is located in Alameda County just west of the City of Oakland and approximately 12 miles east of San Francisco. The service area of the AMP electric system is coterminous with the city boundaries. Shown below is certain population data for the City of Alameda, the County of Alameda and the State of California.

**CITY OF ALAMEDA, COUNTY OF ALAMEDA,
STATE OF CALIFORNIA POPULATION
(1970-2010 as of April 1; 2011-2019 as of January 1)**

Year	City of Alameda	County of Alameda	State of California
1970	70,968	1,071,446	19,971,069
1980	63,852	1,105,379	23,667,764
1990	76,459	1,279,182	29,760,021
2000	72,259	1,443,741	33,871,653
2010	73,812	1,510,271	37,253,956
2011	74,517	1,525,845	37,594,781
2012	75,272	1,546,992	37,971,427
2013	75,911	1,570,384	38,321,459
2014	76,468	1,590,603	38,622,301
2015	77,254	1,613,168	38,952,462
2016	78,750	1,631,008	39,214,803
2017	78,945	1,646,156	39,504,609
2018	78,980	1,656,884	39,740,508
2019	79,316	1,669,301	39,927,315

Sources: 1970-2010, as of April 1, based on historical U.S. Census population data compiled by the California State Department of Finance. 2011-2019, as of January 1, State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, with 2010 Census Benchmark. Sacramento, California, May 2019.

Employment. Alameda is part of the highly urbanized East Bay, which consists of Alameda and Contra Costa counties. A highly skilled labor force, excellent transportation facilities, renowned educational institutions and available advanced research and development resources contribute to the area’s economy. The largest employers in Alameda as of June 30, 2018 are as follows:

**CITY OF ALAMEDA
2017-18 LARGEST EMPLOYERS**

Employer	Business	Number of Employees
Penumbra	Med. Device Developer/Manufacturer	1,754
Alameda Unified School district	Public School	1,025
VF Outdoor	Clothing Design/Manufacturer	813
Alameda Hospital	Health Care/Hospital	754
Oakland Raiders	Sports Team	640
Abbott Diabetes Care	Med. Device Developer/Manufacturer	531
City of Alameda	Local Government	531
U.S. Department of Transportation	Federal Government	440
Kaiser Foundation Health Plan	Health Care/Clinic	425
Cost Plus Corporate Headquarters	Business Administration	410

Source: City of Alameda Finance Department.

The Oakland-Hayward-Berkeley Metropolitan Division, as defined by the State Employment Development Department, includes all cities within Alameda and Contra Costa Counties. According to the California Employment Development Department, the County of Alameda’s unemployment rate was

3.6% for the year 2017. The following table sets forth certain information regarding employment in the City of Alameda from 2013 through 2017.

**CITY OF ALAMEDA
CIVILIAN LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT
2013 TO 2017⁽¹⁾**

	<u>2013⁽²⁾</u>	<u>2014⁽²⁾</u>	<u>2015⁽²⁾</u>	<u>2016⁽²⁾</u>	<u>2017⁽³⁾</u>
Civilian Labor Force	39,900	40,300	41,000	41,800	39,700
Employment	37,400	38,300	39,300	40,300	38,400
Unemployment	2,500	2,000	1,700	1,500	1,300
Unemployment Rate	6.2%	5.0%	4.1%	3.6%	3.3%

⁽¹⁾ Annual averages; not seasonally adjusted. Data may not add due to rounding. Unemployment rates calculated using unrounded data.

⁽²⁾ Reflects March 2016 benchmark.

⁽³⁾ Reflects March 2017 benchmark.

Source: State of California Employment Development Department, Labor Market Information Division, Monthly Labor Force Data for Cities and Census Designated Places, Annual Averages – Revised.

Assessed Valuation. The five-year history of assessed valuations in Alameda is as follows.

**CITY OF ALAMEDA
TOTAL ASSESSED VALUATIONS
(Fiscal Years 2013-14 through 2017-18)**

<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>
\$9,949,194,280	\$10,531,584,610	\$11,155,282,233	\$11,858,309,875	\$12,544,972,055

Source: City of Alameda Finance Department.

Forecast of Capital Expenditures

AMP’s current five-year capital plan for electric facilities contemplates capital expenditures in the following years and amounts:

**CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER
ESTIMATED CAPITAL EXPENDITURES**

<u>Fiscal Year Ended June 30,</u>				
<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
\$5,136,900	\$4,917,400	\$3,751,250	\$3,736,400	\$2,471,400

Source: Alameda Municipal Power.

The capital expenditures are for distribution system improvements and extensions, the underground conversion program, additions for new loads, replacements and maintenance, computer equipment and software and vehicles. AMP anticipates funding the majority of such costs from current year revenues and designated reserves.

Indebtedness; Joint Powers Agency Obligations

As of June 3, 2019, AMP had outstanding obligations under an Installment Sale Agreement, dated as of August 1, 2010 (the “Electric System Installment Sale Agreement”), by and between the Alameda Public Financing Authority and AMP, in the aggregate principal amount of \$[22,795,000], the installment payments payable by AMP under which are payable from and secured solely by a pledge of and lien on net revenues of the electric system of AMP. These obligations are subordinate to the payments required to be made with respect to AMP’s obligations to NCPA and TANC as described below.

As previously discussed, AMP participates in certain joint powers agencies, including NCPA and TANC. Obligations of AMP with respect to TANC and NCPA constitute operating expenses of the AMP electric system payable prior to any of the payments required to be made by AMP under the Electric System Installment Sale Agreement described above. The agreements with NCPA and TANC are on a “take-or-pay” basis, which requires payments to be made whether or not projects are completed or operable, or whether output from such projects is suspended, interrupted or terminated. Certain of these agreements contain “step up” provisions obligating AMP to pay a share of the obligations of a defaulting participant. AMP’s participation and share of debt service obligation (without giving effect to any “step up” provisions) for each of the joint powers agency projects in which it participates are shown in the following table.

**CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER
OUTSTANDING DEBT OF JOINT POWERS AGENCIES
(Dollar Amounts in Millions)
(As of June 3, 2019)**

	Outstanding Debt⁽¹⁾	AMP’s Participation⁽²⁾	AMP’s Share of Outstanding Debt⁽¹⁾
NCPA			
Geothermal Project	\$ 24.5	16.8825%	\$ 4.1
Hydroelectric Project	278.4	10.0000	27.8
Capital Facilities Project Unit One	29.6	19.0000	5.6
TANC – South of Tesla	2.6	2.104%	0.1 ⁽³⁾
TOTAL *	\$335.1		\$37.6

* Columns may not add to totals due to independent rounding.

(1) Principal only. Does not include obligation for payment of interest on such debt.

(2) Participation obligation is subject to increase upon default of another project participant. Such increase shall not exceed, without written consent of a non-defaulting participant, an accumulated maximum of 25% of such non-defaulting participant’s original participation.

(3) AMP’s 1.23% participation share of TANC COTP entitlement has been assigned to other TANC Members. Excludes associated debt obligation. Alameda remains contractually obligated for its share to the extent not paid by assignees. Obligation shown represents portion of TANC COTP debt allocated to Tesla-Midway Transmission Service.

Source: Alameda Municipal Power.

For each of the fiscal year ended June 30, 2018 and the fiscal year ending June 30, 2019, AMP estimates its payment obligations for debt service on its joint powers agency debt obligations to be approximately \$2.6 million. A portion of the joint powers agency debt obligations are variable rate debt,

liquidity support for which is provided through liquidity arrangements with banks. Unreimbursed draws under liquidity arrangements supporting joint powers agency variable rate debt obligations bear interest at a maximum rate substantially in excess of the current interest rates on such obligations. Moreover, in certain circumstances, the failure to reimburse draws on the liquidity agreements may result in the acceleration of scheduled payment of the principal of such variable rate joint powers agency obligations. In connection with certain of such joint power agency obligations, the respective joint powers agency has entered into interest rate swap agreements relating thereto for the purposes of substantially fixing the interest cost with respect thereto. There is no guarantee that the floating rate payable to the respective joint powers agency pursuant to each of the interest rate swap agreements relating thereto will match the variable interest rate on the associated variable rate joint powers agency debt obligations to which the respective interest rate swap agreement relates at all times or at any time. Under certain circumstances, the swap providers may be obligated to make payments to the applicable joint powers agency under their respective interest rate swap agreement that is less than the interest due on the associated variable rate joint powers agency debt obligations to which such interest rate swap agreement relates. In such event, such insufficiency will be payable as a debt service obligation from the obligated joint powers agency members (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from AMP). In addition, under certain circumstances, each of the swap agreements is subject to early termination, in which event the joint powers agency could be obligated to make a substantial payment to the applicable swap provider (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from AMP).

Transfers to the General Fund

The Alameda City Charter provides that AMP transfer to the Alameda General Fund certain excess earnings of the electric system after payment of bond interest and sinking fund requirements and operating expenses (exclusive of depreciation) and certain amounts authorized to be retained by AMP from earnings of the electric system, all as defined in and provided pursuant to the terms of the City Charter. In the absence of such transfer of excess earnings as determined under the City Charter, the Alameda Public Utilities Board has authorized by resolution certain contributions from the electric system to the City General Fund in accordance with the provisions of the City Charter.

The following table sets out the transfers from the AMP electric system to the Alameda General Fund for the five fiscal years 2013-14 through 2017-18.

**CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER
TRANSFERS TO THE GENERAL FUND
(Dollar Amounts in Thousands)**

Fiscal Year	Transfer Amount
2014	\$2,800,000
2015	2,800,000
2016	2,800,000
2017	2,800,000
2018	3,700,000

Source: Alameda Municipal Power.

Litigation has been filed challenging the transfer to the Alameda General Fund, see “– Litigation” below.

Employees

Labor Relations. As of January 1, 2019, approximately 79 City of Alameda employees were assigned specifically to the Alameda electric utility. AMP’s management personnel are represented by the Electric Utility Professionals of Alameda (“EUPA”). Non-management personnel are represented either by the International Brotherhood of Electrical Workers (“IBEW”) or the Alameda City Employees Association (“ACEA”). The current Memoranda of Understanding with each of EUPA, ACEA and IBEW expires June 30, 2022. There have been no strikes or other work stoppages at the City of Alameda, including AMP, since the early 1970s.

Pension Plans. Retirement benefits to City of Alameda employees, including those assigned to AMP, are provided through the City of Alameda’s participation in the California Public Employees Retirement System (“CalPERS”), an agent multiple employer defined benefit pension plan which acts as a common investment and administrative agent for its participating plan members. Copies of the CalPERS annual financial report may be obtained from the CalPERS Executive Office, 400 Q Street, Sacramento, California 95814.

Alameda’s defined benefit pension plans, the Miscellaneous Plan and the Safety Plan of the Alameda, provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries for substantially all Alameda employees. Benefit provisions under the plans are established by State statute and City resolution. No employees assigned to AMP participate in the Safety Plan. Alameda allocates a portion of the net pension liability, net pension expense and related deferred inflows and outflows of resources to AMP on a cost-sharing basis.

Active Miscellaneous Plan members hired prior to January 1, 2013 are required to contribute 7.00% of their annual covered salary and those hired on or after January 1, 2013 are required to contribute 6.75% of their annual covered salary. Alameda’s employer contribution rate is determined annually by the actuary effective on the July 1 following notice of a change in rate. Funding contribution amounts are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Alameda is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. The actuarial methods and assumptions used are those adopted by the CalPERS Board of Administration. The employer contribution rates are established, and may be amended, by CalPERS.

The table below sets forth AMP’s allocated share of Alameda’s city-wide required contributions to the Miscellaneous Plan for the four fiscal years 2014-15 through 2017-18. AMP’s estimated allocated share of Alameda’s city-wide budgeted contributions to the Miscellaneous Plan for the fiscal year ending June 30, 2019 is \$1,752,722.

Fiscal Year Ended June 30	City of Alameda Miscellaneous Plan		
	AMP Allocated Share	Total City Required Contribution Amount	AMP Contributions as a % of Covered Payroll
2015	\$1,016,782	\$ 3,713,053	13.61%
2016	1,312,978	4,525,123	16.84
2017	1,631,011	5,273,062	20.15
2018	1,739,297	5,710,914	20.12

Source: Alameda Municipal Power.

Alameda’s required contributions to CalPERS fluctuate each year and include a normal cost component and a component equal to an amortized amount of the unfunded liability. Many assumptions are used to estimate the ultimate liability of pensions and the contributions that will be required to meet those obligations. The CalPERS Board of Administration has adjusted and may in the future further adjust certain assumptions used in the CalPERS actuarial valuations, which adjustments may increase Alameda’s required contributions to CalPERS in future years. Accordingly, Alameda cannot provide any assurances that Alameda’s required contributions to CalPERS in future years will not significantly increase (or otherwise vary) from any past or current projected levels of contributions.

On December 21, 2016, the CalPERS Board of Administration voted to lower the pension plan’s assumed rate of return for purposes of its actuarial valuations from 7.5% to 7.0% by 2020 (which reduction will be phased in over the period from fiscal year 2017-18 to 2019-20). CalPERS has estimated that with a reduction in the rate of return to 7.0%, most employers could expect a 1% to 3% increase in the percentage of payroll contribution for the normal cost for miscellaneous plans. In addition, CalPERS has estimated that employers could expect gradual increases in their unfunded accrued liability payment, reaching an approximate increase in such payment (relative to the unfunded accrued liability payments projected in the June 30, 2015 valuation report) of 30% to 40% by fiscal year 2024-25 for miscellaneous plans. As a result, required contributions of employers, including Alameda, toward unfunded accrued liabilities, and as a percentage of payroll for normal costs, are expected to increase.

Effective for the fiscal year ended June 30, 2015, Alameda adopted Governmental Accounting Standards Board (“GASB”) Statement No. 68 (“GASB No. 68”), affecting the reporting of pension liabilities for accounting purposes. Under GASB No. 68, Alameda is required to report the Net Pension Liability (*i.e.*, the difference between the Total Pension Liability and the Pension Plan’s Net Position or market value of assets) in its financial statements.

The table below summarizes certain information relating to AMP’s proportionate share of the Net Pension Liability of Alameda’s Miscellaneous Plan as of the June 30, 2014 through June 30, 2017 measurement dates, as reported in AMP’s audited financial statements for the fiscal year ended June 30, 2018. AMP’s proportion of Alameda’s net pension liability was based on AMP’s fiscal year 2016-17 contributions to the pension plan relative to the total contributions of the City of Alameda as a whole.

**Alameda Municipal Power
Proportionate Share of the Net Pension Liability – Miscellaneous Plan**

Measurement Date⁽¹⁾ (June 30)	Proportionate Share of the Net Pension Liability⁽²⁾	Electric Enterprise Fund Share of the Net Pension Liability⁽²⁾	Share of Net Position as a % of Share of Total Pension Liability	Share of Net Pension Liability as a % of Its Covered Payroll
2014	29.00%	\$13,657,795	81.01%	188.02%
2015	29.00	16,040,814	77.96	214.70
2016	29.84	21,006,196	72.92	269.35
2017	30.19	24,557,226	71.50	303.40

⁽¹⁾ Measured using prior fiscal year annual actuarial valuation rolled forward to measurement date using standard update procedures.

⁽²⁾ Reflects AMP’s share of the City of Alameda’s Miscellaneous Plan Net Pension Liability of \$47,095,846, \$55,313,151, \$70,405,741 and \$81,333,405 as of June 30, 2014, June 30, 2015, June 30, 2016 and June 30, 2017 measurement date, respectively.

Source: Alameda Municipal Power.

In the June 30, 2016 actuarial valuation utilized for measuring the pension liability as of the June 30, 2017 measurement date, the Entry Age Normal Actuarial Cost Method was used. The actuarial valuation assumptions used for determining pension liabilities included (a) a 7.15% discount rate (net of

administrative expense); (b) projected salary increases ranging from 3.2% to 12.2% depending on age, service and type of employment; (c) an inflation component of 2.75% per year; and (d) payroll growth of 3.0%.

Retiree Health Benefits. Alameda also provides medical and dental benefits to eligible city employees, including those assigned to AMP, who retire from Alameda, through the City of Alameda Other Post Employment Benefit Plan (the “OPEB Plan”), offered by CalPERS, an agent multi-employer defined benefit healthcare plan. AMP only has miscellaneous employees participating in Alameda’s plan.

Alameda contracts with CalPERS to administer its retiree health benefit plan. A menu of benefit provisions as well as other requirements is established by State statute within the Public Employees’ Retirement Law. Alameda chooses among the menu of benefit provisions and adopts certain benefit provisions of Alameda City Council resolution. Alameda is responsible for establishing and amending the funding policy of the OPEB Plan.

In order to be eligible for benefits, an employee must retire directly from Alameda under CalPERS. Alameda created a trust with Public Agency Retirement Services; however the trust is only for safety employees (police and fire) of Alameda. For eligible miscellaneous employees, Alameda pays the Public Employees’ Medical and Hospital Care Act minimum employer contribution on their behalf, which is \$133 per month for 2018. These employees receive no other post-employment benefits from Alameda. Contributions to the OPEB Plan for miscellaneous employees are generally based on pay-as-you go financing. As of June 30, 2018, the total amount of contributions (benefits paid) by AMP was \$71,130.

For fiscal years prior to fiscal year 2017-18, Alameda’s reported annual OPEB cost (expense) was calculated based upon the annual required contribution (“ARC”), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents the level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded liabilities over a closed period not to exceed 30 years. As noted above, Alameda does not currently pre-fund any portion of the OPEB plan for miscellaneous employees.

The table below sets forth certain information regarding Alameda’s annual OPEB cost and approximate portion of such amount funded by AMP, the percentage of annual OPEB cost contributed and Alameda’s Net OPEB obligation for the three fiscal years 2014-15 through 2016-17.

City of Alameda OPEB Plan – Miscellaneous Employees				
Fiscal Year Ended June 30	Alameda Annual OPEB Cost	Amount Funded by AMP	% of Annual OPEB Cost Contributed	Net OPEB Obligation
2015	\$ 8,010,000	\$57,708	34%	\$31,654,120
2016	10,373,000	57,708	84	33,297,060
2017	10,869,882	57,996	41	39,668,326

Source: Alameda Municipal Power.

Effective for Fiscal Year 2017-18, Alameda follows the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (“GASB No. 75”) affecting the reporting of OPEB liabilities for accounting purposes. GASB No. 75 replaces the requirements of GASB Statement No. 45. GASB No. 75 establishes standards for employers with other postemployment liabilities for recognizing and measuring net OPEB liabilities, along with deferred

inflows and outflows of resources, and expenses/expenditures related to the other postemployment liability. GASB No. 75 does not establish requirements for funding.

AMP's allocated share of Alameda's city-wide annual contributions to the OPEB Plan for the Fiscal Year ended June 30, 2018 was \$71,130. The amount budgeted for AMP's share of OPEB Plan contributions for fiscal year 2018-19 is \$65,000.

Pursuant to GASB No. 75, for the fiscal year ended June 30, 2018, Alameda reported a total OPEB liability of \$1,979,781 for its share of the City of Alameda's total OPEB liability. AMP's proportionate share of the City of Alameda's total OPEB liability as a percentage of covered-employee payroll was 16.51%. AMP's proportion of the City of Alameda's total OPEB liability was based on AMP's fiscal year 2017-18 contributions to the City of Alameda's OPEB Plan relative to the total contributions of the City of Alameda as a whole. AMP's proportionate share of the City's total OPEB liability for the OPEB Plan as of the June 30, 2018 measurement date was 1.92%. The total OPEB liability of the OPEB Plan was measured as of June 30, 2018 and the total OPEB liability for the plan used to calculate the OPEB liability was determined by an actuarial valuation as of June 30, 2016. AMP's proportion of the City of Alameda's total OPEB liability in the June 30, 2016 actuarial valuation was determined using the following actuarial assumptions: (a) a discount rate of 3.98%; (b) payroll growth of 3.00%, plus merit increases; (c) a 2.75% inflation rate; (d) an annual health care cost trend rate of 6.50% initially, declining to 5.0% in 2022 and later years, for PPO plans, and 6.00% initially, declining to 5.0% in 2022 and later years, for HMO plans.

Additional information regarding the City of Alameda's retirement plans and other post-employment benefits can be found in Alameda's comprehensive annual financial reports, which may be obtained at <http://www.cityofalamedaca.gov>.

Insurance

As a member of the California Joint Powers Risk Management Authority ("CJPRMA") and the Local Agency Workers' Compensation Excess Joint Powers Authority ("LAWCX"), Alameda carries both liability and property coverage in excess of self-insurance at varying levels. Through CJPRMA, Alameda carries \$40 million in general liability coverage subject to a \$500,000 self-insured retention. As a member of CJPRMA, Alameda is a participant in both the vehicle physical damage and property programs. Alameda carries physical damage coverage for vehicles worth \$25,000 or more, subject to a \$10,000 deductible. With respect to the property and boiler and machinery coverage, Alameda carries "all risk" (excluding flood and earthquake) replacement cost coverage for both real and personal property, subject to a \$25,000 deductible. Finally, Alameda carries workers' compensation coverage with statutory limits, in excess of a \$350,000 self-insured retention through LAWCX.

Litigation

There is no action, suit or proceeding known to be pending or threatened, restraining or enjoining Alameda in the execution or delivery of, or in any way contesting or affecting the validity of any proceedings of Alameda taken with respect to the Third Phase Agreement.

As described below, litigation has been filed challenging the AMP transfer to the Alameda General Fund:

Zachary Ginsburg, on behalf of himself, and others similarly situated v. City of Alameda et al. Alameda Superior Court Case No. RG15791428. On October 29, 2015, Zachary Ginsburg filed a petition for writ of mandate and complaint in the Superior Court for the State of California, County of Alameda,

alleging that electric rates charged by AMP represent an “illegal tax” under the provisions of Proposition 26, a 2010 ballot measure. An appellate decision earlier in 2015, *Citizens for Fair REU Rates v. City of Redding*, 182 Cal. Rptr. 3d 722 (Feb. 19, 2015), had held that in certain circumstances, electric rates that were used to fund payments by a city-owned electric utility to a city’s general fund could constitute a “tax” subject to provisions of the California Constitution that would require voter approval. Plaintiff alleges that because AMP made certain transfers to Alameda’s General Fund without voter approval, he and a class of all AMP customers who paid for electricity from October 2012 through the present are entitled to “tax refunds.” Plaintiff also complains that differences between the rates charged to commercial users and residential users are an alleged illegal cross-category subsidy in favor of commercial users. After Plaintiff filed a Second Amended Verified Petition on March 15, 2016, Alameda filed its answer, denying the allegations and stating its affirmative defenses, on April 26, 2016.

The California Supreme Court granted review of the *City of Redding* matter, and on August 27, 2018, the California Supreme Court rendered its decision, reversing the judgement of the Court of Appeal. The California Supreme Court determined that the transfer from the city-owned electric utility to the city’s general fund, which was calculated as a “payment in lieu of taxes,” itself is not the type of exaction that is subject to Article XIIC of the California Constitution. The court reasoned that it is only the city’s electric utility rate, not the payments made by the city-owned utility, that is imposed on customers for electric service. The California Supreme Court concluded that because the total rate revenue of the electric utility was insufficient to cover the electric utility’s uncontested operating expenses (other than the payments in lieu of taxes) in the years at issue, the challenged rate did not exceed the reasonable costs of providing electric service, and therefore did not constitute a tax.

Alameda had moved to stay the *Ginsburg* matter, and the Court granted the stay on December 9, 2016. No trial date or date for hearing on whether a class should be certified has yet been set. *{please confirm if any update to litigation}*

Present lawsuits and claims concerning AMP’s electric system are incidental to the ordinary course of operations of the electric system and are largely covered by Alameda’s self-insurance program. In the opinion of AMP’s management and, with respect to such litigation, the Alameda City Attorney, such claims and litigation will not have a materially adverse effect upon the financial position of AMP.

Significant Accounting Policies

AMP’s most recent Component Unit Financial Statements for the fiscal years ended June 30, 2018 and 2017 were audited by Vavrinek, Trine, Day & Company, LLP, Pleasanton, California, in accordance with generally accepted auditing standards. The audited financial statements contain opinions that the financial statements present fairly the financial position of AMP. The reports include certain notes to the financial statements which are not described herein. Such notes constitute an integral part of the audited financial statements. Copies of these reports are available upon request from the City of Alameda, Alameda Municipal Power, 2000 Grand Street, Alameda, California 94501 and from their website at www.AlamedaMP.com. It is the policy of Alameda to periodically bid, select and retain independent auditors.

Governmental accounting systems are organized and operated on a fund basis. A fund is defined as an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein. Funds are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions or limitations.

AMP's operations are accounted for as an Enterprise Fund. Enterprise funds are used by municipalities to account for operations which are financed and operated similar to private business enterprises, where the intent of the governing body is that the costs and expenses, including depreciation, of providing goods and services to the public on a continuing basis be recovered primarily through user charges.

AMP's accounting records and financial statements are on the accrual basis and are substantially in accordance with the Uniform System of Accounts for Class A and B Electric Utilities prescribed by the FERC, as required by the Alameda City Charter.

Condensed Operating Results and Selected Balance Sheet Information

The following table sets forth summaries of operating results and selected balance sheet information of AMP's electric utility for the five fiscal years 2013-14 through 2017-18. The information for the fiscal years ended June 30, 2014 through June 30, 2018 was prepared by AMP on the basis of its audited financial statements for such years. The historical debt service coverage ratios have been calculated in accordance with AMP's Electric System Installment Sale Agreement.

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**CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER
CONDENSED OPERATING RESULTS AND SELECTED BALANCE SHEET INFORMATION**

	Fiscal Years Ended June 30				
	2014	2015	2016	2017	2018
Electric System Revenues					
Sales of Electricity	\$51,137,641	\$50,790,790	\$54,221,022	\$55,925,748	\$59,501,406
REC, LCSF & C&T Sales ⁽⁶⁾	1,355,947	1,390,534	1,852,516	3,159,383	3,435,082
Other Revenues ⁽¹⁾	6,938,783	6,824,069	6,363,950	5,071,175	1,890,185
Total Electric System Revenues	\$59,432,371	\$59,005,393	\$62,437,488	\$64,156,306	\$64,827,185
Operation and Maintenance Costs					
Purchased Power ⁽²⁾	\$28,196,783	\$27,517,599	\$29,781,270	\$28,201,607	\$28,618,484
Energy Efficiency, Solar and Other	1,086,966	1,605,608	1,684,963	1,504,629	1,172,615
Operations & Maintenance Customer Service, Information Systems	4,097,223	4,328,813	4,573,500	4,674,307	4,814,122
Administrative & General Customer Relations	2,074,830	2,113,922	2,226,364	2,170,617	2,296,001
Jobbing Sales Expense	6,032,512	6,115,467	7,732,884	7,425,117	10,527,575
Balancing Account Adjustment	499,294	531,550	540,214	530,544	505,711
Total Operation and Maintenance Costs⁽³⁾	\$40,809,073	\$41,755,514	\$47,864,751	\$46,926,037	\$51,123,219
Net Revenues	\$18,623,298	\$17,249,879	\$14,572,737	\$17,230,269	\$13,703,966
Rate Stabilization Fund Transfers	(\$6,938,783)	(\$6,824,069)	(\$6,363,950)	(\$5,071,175)	(\$3,435,082)
Use of Reserves	134,636	1,411,438	2,281,580	1,020,393	5,652,517
Adjusted Annual Net Revenues	\$11,819,151	\$11,837,248	\$10,490,367	\$13,179,487	\$15,921,401
Debt Service	2,747,479	2,712,637	2,640,325	2,631,044	2,626,368
Debt Service Coverage ⁽⁴⁾	4.30	4.36	3.97	5.01	6.06
Amount Available After Debt Service	\$9,071,672	\$9,124,611	\$7,850,042	\$10,548,443	\$13,295,033
Selected Balance Sheet Information:					
(in thousands)					
Total Unrestricted					
Cash & Investments ⁽⁵⁾	\$45,581	\$42,094	\$41,909	\$39,422	\$48,058
Rate Stabilization Fund Balance ⁽⁶⁾	11,222	16,505	20,583	24,633	21,431
Net Plant in Service	38,052	35,669	38,470	36,275	38,333
Construction Work in Progress	46	4,519	1,736	6,452	2,873
Electric Utility Plant-Net	38,097	40,188	40,206	42,727	41,206
Outstanding Electric System Debt	\$28,749	\$27,590	\$26,460	\$25,290	\$24,070

⁽¹⁾ Other Revenues includes operating and non-operating sources such as solar surcharge, interest income, lease income, account establishment, reconnection and late fees, jobbing sales and other miscellaneous items.

⁽²⁾ Includes purchased power costs and payments to NCPA and TANC. Also includes prior year budget settlements from NCPA.

⁽³⁾ Excluding Payments in lieu of taxes and depreciation.

⁽⁴⁾ Adjusted Annual Net Revenues divided by debt service.

⁽⁵⁾ Includes General Reserve balance held at NCPA. See also "Available Funds" below.

⁽⁶⁾ Includes renewable energy credit sales and cap and trade auction sales placed into reserve for Rate Stabilization Fund. See "-- Energy Efficiency and Conservation; Renewable Resources" above.

Source: Alameda Municipal Power.

Interfund Transfers. During the fiscal year 2008-09, \$1,095,614 in interfund transfers (*i.e.*, no repayment expected) from the Electric System enterprise fund to the telecommunications system enterprise fund were recorded for expenses due to the sale of the Alameda's telecommunications system on November 21, 2008. During the fiscal years 2009-10 through 2015-16, additional interfund transfers from the Electric System enterprise fund to the telecommunications system enterprise fund amounted to \$2,734,279, \$2,929,410, \$987,222, \$206,429, \$581,343, \$574,818, and \$2,190,230, respectively, for expenses. In June 2016, AMP made the final payment to the City of Alameda for approximately \$2.2 million terminating the telecommunications enterprise fund.

Available Funds. Of the total unrestricted cash and investments, as of June 30, 2018, the balance in cash and cash equivalents available at AMP was \$25,980,675. In addition, AMP had available in reserve accounts held by NCPA an additional \$4,550,080 as of such date.

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CITY OF LODI

Introduction

The City of Lodi (“Lodi”) is a general law city in the State of California incorporated in 1906. Lodi is located in the San Joaquin Valley of California, 35 miles south of the State capital of Sacramento, and 90 miles east of San Francisco. Lodi’s boundaries encompass approximately 13.98 square miles.

Lodi provides electric utility service through an electric utility department. The legal responsibilities and powers of the electric utility department, including the establishment of rates and charges, are exercised through the five-member Lodi City Council. Commencing with the November 2018 election, the City has changed to the election of councilmembers by district. Each Councilmember is elected for four years with staggered terms. The Lodi electric utility department is under the direction of the Electric Utility Director who is appointed by the City Manager.

Lodi joined NCPA at its founding in 1968. Lodi participates in several NCPA generation projects and member service programs. In addition, Lodi is an NCPA Pool Member and NCPA’s Central Dispatch Center in Roseville provides real-time dispatching and scheduling of most available resources to serve Lodi’s electric load.

The electric system serves the entire area of the City of Lodi (approximately 13.98 square miles) and has approximately 131 miles of overhead lines and over 123 miles of underground lines. During the fiscal year ended June 30, 2018, the Lodi electric system served 26,430 customers, comprised of 23,145 residential customers, 3,116 commercial/industrial customers and 169 other customers. On July 24, 2006, an all-time, historical high peak demand of 140.4 MW was reached.

Only the revenues of the Lodi electric system will be available to pay amounts owed by Lodi under the Third Phase Agreement.

The Lodi electric department’s main office is located at 1331 South Ham Lane, Lodi, California 95242, (209) 333-6762. For more information about Lodi and its electric system, contact Melissa Price, Interim Electric Utility Director, at the above address and telephone number. A copy of the most recent comprehensive annual financial report of the City of Lodi (the “CAFR” or “Annual Report”) is available on Lodi’s website at <http://www.lodi.gov> and on the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access system at <http://emma.msrb.org/>. The Annual Report is incorporated herein by this reference. However, the information presented on such website or referenced therein other than the Annual Report is not part of this Remarketing Memorandum and is not incorporated by reference herein.

Power Supply Resources

The following table sets forth information concerning Lodi’s power supply resources and the energy supplied by each during the fiscal year ended June 30, 2018.

**CITY OF LODI
ELECTRIC UTILITY DEPARTMENT
POWER SUPPLY RESOURCES
For the Fiscal Year Ended June 30, 2018**

Source	Capacity Available (MW)⁽¹⁾	Actual Energy (MWh)	% of Total Energy
Purchased Power ⁽²⁾ :			
Western Area Power Administration	8.1	19,477	4.1%
NCPA			
Geothermal Project	11.5	80,423	17.0
Hydroelectric Project	26.2	51,030	10.8
Combustion Turbine Project No. 1	9.5	2,030	0.4
Capital Facilities, Unit One	19.6	3,523	0.7
Lodi Energy Center	26.6	102,133	21.5
Contracts and Exchanges ⁽³⁾	35.5	215,560	45.5
Total	137.0	474,176	100.0%
Total Capacity and Energy Sold at Wholesale	N/A	38,258	
Lodi System Requirement for Retail Load ⁽⁴⁾	130.9	435,918	

(1) Information compiled from NCPA Annual Resource Adequacy Filings.

(2) Entitlements, firm allocations and contract amounts.

(3) Includes participation in Astoria 2 Solar Project, Seattle City Light Exchange (terminated in May 2018), and purchases procured through NCPA for Lodi.

(4) Information compiled from NCPA All Resources Bill.

Source: City of Lodi.

In the fiscal year ended June 30, 2018, Lodi's average cost of power delivered to the Lodi electric system was 9.3 cents per kWh.

Purchased Power

Western. Lodi is a party to the Contract for Electric Service Base Resource (the "Base Resource Contract") with the Western Area Power Administration ("Western"), which is scheduled to expire on December 31, 2024, under which Lodi takes delivery of 0.569% share of the base resource output of the Central Valley Project ("CVP"). The CVP consists of a series of federal hydroelectric facilities located and interconnected in Northern California. The amount of energy delivered to Lodi under the Base Resource Contract is subject to hydrology variability and water storage levels within the CVP. The Base Resource Contract is structured as a take-or-pay basis; whereby Lodi is obligated to pay its share of Western's costs whether or not it receives any power. Base Resource energy is scheduled for delivery to Lodi by NCPA.

Other Purchases. Lodi had a 25 MW participation share in the Capacity and Energy Exchange Agreement between NCPA and Seattle City Light (the "SCL Exchange Agreement"), pursuant to which energy was exchanged between the parties based on seasonal requirements. The amount of energy received by Lodi during fiscal year 2017-18 is reflected in the Contracts and Exchanges figures listed in the table above. Energy received under the SCL Exchange Agreement was transmitted to Lodi using California Independent System Operator Corporation ("CAISO") transmission. The SCL Exchange expired on May 31, 2018. Other power purchases for fiscal year 2017-18, as reflected in the Contracts and Exchanges figures listed in the table above, are associated with short-term purchases. NCPA transacts and schedules daily and hourly (spot) power purchases and sales to balance and serve Lodi's native load requirements.

Joint Powers Agency Resources

NCPA. Lodi does not independently own any generation assets but, in addition to power purchased from Western and others, Lodi is a participant in various NCPA projects. Lodi has a 10.37% project participation entitlement share of the NCPA Hydroelectric Project; a 39.5% project participation entitlement share of the NCPA Capital Facilities Project (also known as the Combustion Turbine Project Number Two or Steam Injection Gas Turbine Project); a 14.56% project participation entitlement share of the Geothermal Generating Unit 2 Project and a 6.0% project participation entitlement share of the Geothermal Generating Project Number 3 (which are jointly operated as a single project, the NCPA Geothermal Project); a 13.39% project participation entitlement share in the NCPA Combustion Turbine Project Number One (exclusive of the portion acquired by the City of Roseville); and a 9.5% generation entitlement share in NCPA's Lodi Energy Center Project. Lodi additionally participates in the NCPA Geysers Transmission Project, in which it has a 20.61% entitlement share, pursuant to which NCPA, on behalf of Lodi, delivers output from the geothermal generating assets pursuant to the agreement of co-tenancy in the Castle Rock Junction-Lakeville 230-kV Transmission Line. For a description of such resources, see "THE HYDROELECTRIC PROJECT" and "OTHER NCPA PROJECTS" in the front part of this Remarketing Memorandum. For each of these NCPA projects in which Lodi participates, Lodi is obligated pursuant to contract to pay, on an unconditional take-or-pay basis, as an operation and maintenance cost of its electric system, its entitlement share of the debt service on NCPA bonds issued for the projects, as well as its share of all operation and maintenance expenses of the projects. See also "– Indebtedness; Joint Powers Agency Obligations" below.

TANC California-Oregon Transmission Project. Lodi is a member of the Transmission Agency of Northern California ("TANC") and has executed an agreement (the "TANC Agreement") to acquire a participation percentage share of TANC's entitlement of the California-Oregon Transmission Project ("COTP") transfer capability. Lodi participated in the acquisition of an increased share of transfer capability of the COTP in connection with the acquisition by TANC in April 2008 of the COTP transmission assets of the City of Vernon, California ("Vernon"), one of the original owners of the COTP, which acquisition was financed by TANC through the issuance of additional TANC debt (the "Vernon acquisition debt"). Lodi has a participation share of 26.7 MW of TANC's entitlement to transfer capability of the COTP and is responsible for 1.92% of TANC's COTP operating and maintenance expenses and 1.89% of TANC's COTP debt service (non-Vernon) and 2.62% of the Vernon acquisition debt. See "CITY OF SANTA CLARA – Transmission Resources – TANC California-Oregon Transmission Project" for a further description of the COTP and the TANC Agreement.

On April 2, 2014, the Lodi City Council approved a 25-year layoff of Lodi's 26.7 MW share of COTP transfer capability, effective July 1, 2014, whereby Lodi and all of the TANC Members who are in the balancing authority area of the CAISO laid off their interests to certain other COTP participants (*i.e.*, Modesto Irrigation District ("MID"), Turlock Irrigation District ("TID") and Sacramento Municipal Utility District ("SMUD")) (subject to certain rights of Lodi and the other layoff entities to recall, and certain rights of MID, TID, and/or SMUD to return, up to 50% of their respective shares of the entitlement amount laid off). In exchange for their respective increased right to use of COTP transfer capability, MID, TID and SMUD will pay Lodi's (and the other layoff entities') current allocated share of COTP costs. This layoff arrangement does not change Lodi's membership status in TANC and does not relieve Lodi of its obligations under the TANC Agreement in the event of any default in payment by an acquiring party. See also "– Indebtedness; Joint Powers Agency Obligations" below.

TANC Tesla–Midway Transmission Service. TANC and certain TANC Members have arranged for Pacific Gas & Electric Company ("PG&E") to provide TANC and its members with 300 MW of firm bi-directional transmission capacity on its transmission system between its Midway Substation near Buttonwillow, California, and its Tesla Substation near Tracy, California, near the southern physical terminus of the COTP (the "Tesla–Midway Transmission Service") under an agreement known as the South of Tesla Principles. Lodi's share of this Tesla–Midway Transmission Service is 6.21 MW. Lodi has utilized

its full allocation of Tesla–Midway Transmission Service for firm and non-firm power transactions in the past. See “CITY OF SANTA CLARA – Transmission Resources – *TANC California-Oregon Transmission Project*” for a further description of the COTP and the TANC Agreement. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – PG&E Bankruptcy” in the front part of this Remarketing Memorandum.

Renewable Resources

Lodi expects to procure, either on its own or through NCPA, a renewable power resource portfolio that satisfies applicable State requirements, the main provisions of which are currently contained in the California Renewable Energy Resources Act (“SBX1-2”), the Clean Energy and Pollution Reduction Act of 2015 (“SB 350”), and the California Global Warming Solutions Act of 2006 (the “GWSA”). See “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings” in the front part of this Remarketing Memorandum.

Lodi’s power mix in calendar year 2017 consisted of 31% eligible renewable resources. Pursuant to SBX1-2, during Compliance Period 1 (January 1, 2011 through December 31, 2013), an average of 20% of the electric system’s retail sales were required to be procured from eligible renewable energy resources. Lodi exceeded the RPS target under SBX1-2 for Compliance Period 1, with an average of approximately 21.7% of Lodi’s energy portfolio supplied from renewable resources over such period. During Compliance Period 2 (January 1, 2014 through December 31, 2016) under SBX1-2, the electric system was required to procure electricity products from eligible renewable energy resources representing a total equal to 20% of 2014 retail sales, 20% of 2015 retail sales and 25% of 2016 retail sales. Lodi also exceeded the RPS target for Compliance Period 2, with approximately 21.1% of the City’s energy portfolio supplied from renewable resources in calendar year 2014, approximately 21% of Lodi’s energy portfolio supplied from eligible renewable resources in calendar 2015, and approximately 24% of Lodi’s energy portfolio supplied from eligible renewable resources in calendar year 2016. With its existing power resources, participation in a new solar energy project (described below), and historic carryover, Lodi anticipates meeting its Renewable Portfolio Standard (“RPS”) requirements through 2022.

Lodi’s current renewable power resources include geothermal, solar and small hydroelectric. Lodi’s current renewable power resources are described below.

The Astoria 2 Solar Project, which reached commercial operation on December 9, 2016, is a 75 MW photovoltaic plant developed by Recurrent Energy, located in the southeastern portion of Kern County. Lodi entered into a power purchase agreement with Recurrent Energy for a 13.3333%, or 10 MW, share of the output of the Astoria 2 Solar Project, which is enough energy to meet approximately 7% of Lodi’s retail load.

The contract term for the Astoria 2 Solar Project is 20 years. Energy from this project qualifies as Portfolio Content Category 1 energy under RPS. Combined with existing generation resources and historic carryover, this project will enable Lodi to meet its RPS obligations through 2021.

The cost of power from the Astoria 2 Solar Project is fixed at \$63/MWh for the 20-year life of the project. The price is only paid for energy actually delivered. Lodi does not have any ownership interest in the project and will not incur any capital expenditures related to the project.

The Antelope Expansion Phase 1 Solar Facility (“Antelope Expansion Project”), which is expected to reach commercial operation on December 31, 2021, is a 51 MW photovoltaic plant developed by Antelope Expansion 1B, LLC, located in the City of Lancaster, Los Angeles County, California. NCPA, on behalf of Lodi and other NCPA members, entered into a power purchase agreement with Antelope Expansion 1B, LLC for a 33.78%, or 17 MW, share of the output of the Antelope Expansion Project. Lodi has a 58.82%, or 10 MW, project participation percentage share of the Antelope Expansion Project.

The contract term for the Antelope Expansion Project is 20 years. Energy from this project will qualify as Portfolio Content Category 1 energy under RPS. The output produced from the project will contribute to Lodi's compliance with RPS obligations beyond the 2020 compliance period.

The cost of power from the Antelope Expansion Project is fixed at \$39.00/MWh for the 20-year life of the project. The price is only paid for energy actually delivered. Lodi does not currently have any ownership interest in the project, and as such will not incur any capital expenditures related to the project.

Future Power Supply Resources

Based upon its current forecasted sales growth, resource mix and market prices, Lodi believes its annual balance-of-month, day-ahead, and hour-ahead purchases will be less than 25% of total energy requirements for the next two years. Lodi's interest in multiple NCPA generation projects provides substantial capacity toward covering Lodi's net short position in the event that market prices rise above the respective unit's cost of production. Lodi has developed medium-term hedging strategies to reduce volatility associated with market purchases and the seasonal nature of its loads and resources. In addition, due to the long lead time in acquiring certain resources, including renewable resources, Lodi, through NCPA, continues to consider additional projects that might be included in its resource mix in coordination with NCPA and other NCPA members.

Energy Efficiency and Conservation

Since 1998, Lodi has maintained a public benefits program as required by State law, a component of which is demand-side management (commonly referred to as energy efficiency and conservation). Under this program, Lodi offers customers rebates to incentivize investment in energy efficient products and improvements, including insulation, replacement windows, improvements to air duct systems, high-efficiency air conditioners, heat pumps, attic and whole-house fans, refrigeration efficiency improvements, EnergyStar appliances, web-enabled smart thermostats, pump/motor/process equipment improvements and lighting retrofits.

Lodi also provides energy education for residential and non-residential customers, including on-site energy audits, and hosts a number of programs to promote energy education and customer outreach. As part of its education and customer outreach efforts, Lodi provides a school-based energy efficiency education program for 6th grade elementary school students, offers free energy efficiency measures through its direct install program and is a sponsor of the annual NorCal Science Festival.

Lodi utility customers continue to be positively impacted by one or more of Lodi's public benefits programs, either in the form of a direct utility rebate or via one of its outreach and educational programs.

Interconnections, Transmission and Distribution Facilities

Lodi's electric system is interconnected with the system of PG&E (three 60 kV lines). Lodi owns facilities for the distribution of electric power within the city limits of Lodi, which includes approximately 14 miles of 60 kV power lines, approximately 240 miles of 12 kV distribution lines (approximately 51% of which are underground) and four substations. Lodi's system experiences approximately 52.1 minutes of outage time per customer per year.

Lodi does not own or operate any transmission assets, and the service area of the Lodi electric system is not located in a designated wildfire area. In connection with the operation of its facilities and equipment, Lodi currently has in place a number of safety and emergency response measures. Lodi conducts a visual inspection of its distribution system each year. Lodi also performs ongoing vegetation management activities, including both preventive measures to control vegetation growth and actions to address reports of potentially hazardous conditions. Through its SCADA operations and control system, Lodi has the ability

to remotely operate equipment on its system as needed. Lodi maintains an Electric Emergency Plan to establish response protocols in the event of an emergency, including fire. The Electric Emergency Plan is reviewed and updated annually. Pursuant to the requirements of California Senate Bill 901 (“SB 901”), Lodi expects to prepare a wildfire mitigation plan to be completed prior to January 1, 2020. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – Legislation Relating to Wildfires; Related Risks” in the front part of this Remarketing Memorandum.

Rates and Charges

Lodi has the exclusive jurisdiction to set electric rates within its service area. These rates are not subject to review by any State or federal agency.

Lodi’s fiscal year 2017-18 average rate per kWh for residential service was 18.0 cents. Lodi’s fiscal year 2017-18 average rate for commercial and industrial service was 15.3 cents per kWh. Lodi’s fiscal year 2018-19 average rate per kWh for residential service is projected to be 17.4 cents. Lodi’s fiscal year 2018-19 average rate for commercial and industrial service is projected to be 15.5 cents per kWh.

The following table presents a recent history of Lodi’s rate increases since 2013. The last base rate increase took effect July 1, 2017.

**CITY OF LODI
ELECTRIC UTILITY DEPARTMENT
RATE CHANGES**

<u>Effective Date</u>	<u>Percent Change</u>
December 2018	Update to Economic Development rates
July 2018	Revision of Power Factor charge for non-residential customers
December 2017	Elimination of Solar Surcharge
July 2017	Average 2% increase across all rate classes
	Electric Vehicle rate restructure replacing minimum charge with customer charge and aligning energy charges with residential rates;
	City rate restructure replacing minimum charge with customer charge
November 2016	Residential rate restructure replacing minimum charge with customer charge and reduction to 3 energy tiers; Mobile home park rate restructure replacing minimum charge with customer charge, reducing pad discount and reduction to 3 energy tiers
September 2015	Extended Economic Development rates
January 2015	Average 5% increase across all rate classes
July 2013	Established Electric Vehicle and Industrial Equipment Charging Rates

Source: City of Lodi.

The Lodi City Council reviews electric system rates periodically and makes adjustments as necessary. All customers pay rates in accordance with the standard rate tariffs published in the Lodi Municipal Code.

Lodi implemented an Energy Cost Adjustment (“ECA”) in August 2007. The purpose of the ECA is to recover market power costs due to the fluctuations in power market conditions and energy sales. The ECA is reviewed monthly and is either increased or decreased as market conditions and energy sales change. The historic, average ECA is listed below.

CITY OF LODI
AVERAGE ENERGY COST ADJUSTMENT
For Fiscal Years 2013-14 through 2017-18

Fiscal Year	ECA (\$/kWh)
2013-14	0.0082
2014-15	0.0057
2015-16	0.0064
2016-17	0.0056
2017-18	0.0123

Largest Customers

The ten largest customers of Lodi's electric system in terms of kWh sales, as of June 30, 2018, accounted for 29% of total kWh sales and 23% of revenues. The largest customer accounted for 5.3% of total kWh sales and 3.7% of total revenues.

Customers, Sales, Revenues and Demand

The number of customers, kWh sales, revenues derived from sales by classification of service and peak demand during the five fiscal years 2013-14 through 2017-18, are listed below.

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT
CUSTOMERS, SALES, REVENUES AND DEMAND⁽¹⁾

	Fiscal Years Ended June 30,				
	2014	2015	2016	2017	2018
Number of Customers:					
Residential	22,547	22,355	22,459	22,870	23,145
Commercial	2,898	3,264	3,296	3,071	3,075
Industrial	38	40	44	41	41
Other	250	253	213	170	169
Total	25,733	25,912	26,012	26,152	26,430
Kilowatt Hour (kWh)					
Sales:					
Residential	148,762,783	148,950,428	151,137,940	146,192,111	155,539,509
Commercial	146,176,148	149,380,413	150,522,357	149,882,241	144,244,913
Industrial	130,333,102	128,814,673	125,018,845	118,900,040	115,066,917
Other	12,022,160	11,635,397	10,567,193	10,436,182	10,306,535
Total	437,294,193	438,780,911	437,246,335	425,410,574	425,157,874
Revenues from Sale of Energy ⁽²⁾					
Residential	\$25,270,075	\$25,165,194	\$26,525,558	\$26,021,916	\$27,967,919
Commercial	23,127,603	23,780,354	24,693,195	24,432,075	25,105,915
Industrial	14,381,296	14,418,921	14,469,390	13,852,860	14,877,597
Other	1,913,833	1,871,470	1,819,036	1,540,730	1,295,279
Total	\$64,692,808	\$65,235,939	\$67,507,179	\$65,847,581	\$69,246,709
Peak Demand (MW)	128.7	134.0	124.3	128.7	130.9

⁽¹⁾ Columns may not add to totals due to rounding.

⁽²⁾ Excludes revenues from California Energy Commission Tax.

Sources: City of Lodi, CAFR and Customer Information System reports.

Service Area

Population. Lodi is located in the San Joaquin Valley, adjacent to State Highway 99, between the City of Stockton, 10 miles to the south, and the City of Sacramento, 35 miles to the north. The service area of Lodi's electric system is coterminous with the city boundaries. The local economy is diverse among residential, agricultural, commercial and industrial sectors.

The following chart indicates the growth in the population of the City of Lodi, the County of San Joaquin and the State of California since 1970.

**CITY OF LODI, COUNTY OF SAN JOAQUIN,
STATE OF CALIFORNIA POPULATION ESTIMATES
(1970–2010 as of April 1; 2011-2019 as of January 1)**

<u>Year</u>	<u>City of Lodi</u>	<u>County of San Joaquin</u>	<u>State of California</u>
1970	28,691	291,073	19,971,069
1980	35,221	347,342	23,667,764
1990	51,874	480,628	29,760,021
2000	56,999	563,598	33,871,653
2010	62,134	685,306	37,253,956
2011	62,598	693,114	37,594,781
2012	63,113	700,519	37,971,427
2013	63,400	706,418	38,321,459
2014	63,700	713,315	38,622,301
2015	64,503	724,859	38,952,462
2016	65,074	736,027	39,214,803
2017	65,981	747,579	39,504,609
2018	67,042	757,279	39,740,508
2019	68,272	770,385	39,927,315

Source: 1970-2010, as of April 1, based on historical U.S. Census population data compiled by the California State Department of Finance. 2011-2019, as of January 1, State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, with 2010 Census Benchmark. Sacramento, California, May 2019..

Employment. Lodi is a worldwide agricultural shipping center for the San Joaquin Valley. The surrounding prime agricultural land is a major producer of wine grapes.

The City's employment base is diverse with industry that includes agribusiness, biotechnology, distribution, food and beverage product manufacturing, general service, government, health care, heavy manufacturing, and wine-based tourism and lodging.

The largest employers in Lodi as of June 30, 2018 are as follows:

CITY OF LODI LARGEST EMPLOYERS

Employer	Business	Number of Employees
Lodi Unified School District	Education	3,359
Pacific Coast Producers	Canning	1,663
Lodi Health Hospital	Healthcare	1,390
Blue Shield	Healthcare	848
TreeHouse	Specialty Food	496
Walmart	Retail	484
City of Lodi	Government	390
Farmers & Merchants Bank	Banking	358
Costco	Retail	227
Target	Retail	145

Source: City of Lodi, City Manager's Office.

The following table sets forth certain information regarding employment in the City of Lodi, the County of San Joaquin and the State from 2013 through 2017.

**CITY OF LODI
UNEMPLOYMENT RATES 2013 TO 2017⁽¹⁾**

Year	City of Lodi	County of San Joaquin	State of California
2013	11.60%	12.30%	8.90%
2014	9.90	10.50	7.50
2015	8.30	8.90	6.20
2016	7.60	8.10	5.50
2017	6.76	7.20	4.80

⁽¹⁾ Unemployment rates not seasonally adjusted, average annual rates.

Source: U.S. Bureau of Labor Statistics.

Assessed Valuation. A five-year history of assessed valuations in Lodi is as follows:

**CITY OF LODI
ASSESSED VALUATIONS
For Fiscal Years 2013-14 through 2017-18
(Dollar Amounts in Thousands)**

Fiscal Year	Land	Improvements	Personal Property	Total	Less Exemptions	Net Assessed Value
2013-14	\$1,364,401	\$3,443,266	\$321,741	\$5,129,408	\$324,439	\$4,804,969
2014-15	1,469,347	3,610,391	338,312	5,418,050	326,833	5,091,217
2015-16	1,601,581	3,736,867	309,861	5,648,309	331,562	5,316,747
2016-17	1,711,208	3,854,604	294,457	5,860,269	334,485	5,525,784
2017-18	1,873,216	4,286,480	275,439	6,435,135	345,179	6,089,956

Source: San Joaquin County Auditor-Controller's Office.

Forecast of Capital Expenditures

Lodi's five-year capital projection for electric facilities contemplates potential capital expenditures for substation upgrades, streetlight improvements, ongoing overhead and underground maintenance, and related system reliability projects. Over the next five years, capital expenditures (not including the project described in the next paragraph) are estimated to cost approximately \$16 million. Lodi anticipates funding such capital costs from rate revenues and special development fees.

In addition, approved in March 2018 by the CAISO, the Northern San Joaquin 230 kV Transmission Project will help address the area's reliability and capacity needs. The project includes connecting PG&E's existing Brighton-Bellota 230 kV Transmission Line into PG&E's Lockeford Substation and building a new 230 kV double circuit transmission line from PG&E's Lockeford Substation to a new PG&E 230 kV switching station in Lodi. Lodi's 230/60kV Substation Project consists of two 230/60kV transformers along with site improvements, facilities and equipment required for the interconnection to PG&E's new 230 kV switching station and to Lodi's existing 60/12kV Industrial Substation. The estimated in-service date is 2023. The cost to Lodi is currently estimated to be approximately \$30 million, which Lodi expects to be funded by electric system revenue debt financing. The project is anticipated to realize a cost savings of approximately \$4 million annually by eliminating the low voltage transmission access charge.

Indebtedness; Joint Powers Agency Obligations

As of June 3, 2019, Lodi had outstanding \$41.6 million principal amount of obligations payable from net revenues of Lodi's electric utility system. These obligations are subordinate to the payments required to be made with respect to the Lodi's obligations to NCPA and TANC described below. In addition, Lodi has an outstanding loan with F&M Bank in the amount of \$887,000 associated with an LED Streetlight Improvement Project. The annual loan payments will be paid from the Greenhouse Gas Free Allowance proceeds. Lodi has no variable rate or auction rate direct debt.

As previously discussed, Lodi participates in certain joint powers agencies, including NCPA and TANC, which have issued indebtedness to finance the costs of certain projects on behalf of the respective project participants. Obligations of Lodi under its agreements with respect to TANC and NCPA constitute operating expenses of Lodi. Such agreements are on a "take-or-pay" basis, which requires payments to be made whether or not projects are completed or operable, or whether output from such projects is suspended, interrupted or terminated. Certain of these agreements contain "step up" provisions obligating Lodi to pay a share of the obligations of a defaulting participant. Lodi's participation and share of debt service obligation (without giving effect to any "step up" provisions) for each of such joint powers agency projects in which it participates are shown in the following table.

CITY OF LODI
ELECTRIC UTILITY DEPARTMENT
OUTSTANDING DEBT OF JOINT POWERS AGENCIES
(Dollar Amounts in Millions)
(As of June 3, 2019)

	Outstanding Debt⁽¹⁾	Lodi's Participation⁽²⁾	Lodi's Share of Outstanding Debt⁽¹⁾
NCPA			
Geothermal Project Three	\$ 24.5	10.28%	\$ 2.5
Hydroelectric Project	278.4	10.37 ⁽³⁾	29.6 ⁽³⁾
Capital Facilities Project	29.6	39.50	11.7
Lodi Energy Center, Issue One	220.9	17.03	37.6
TANC			
COTP Bonds	191.8	0.0 ⁽⁴⁾	0.0 ⁽⁴⁾
TOTAL	\$745.2	100.00%	\$81.4

⁽¹⁾ Source: NCPA. Outstanding debt does not include unamortized premium/discount.

⁽²⁾ Participation obligation is subject to increase upon default of another participant. Such increase shall not exceed, without the written consent of a non-defaulting participant, an accumulated maximum of 25% of such non-defaulting participant's original participation.

⁽³⁾ Lodi's actual payments represent approximately 10.64% of outstanding debt service as a result of credit to non-participating members with respect to portion of debt obligation.

⁽⁴⁾ Excludes Lodi's 3.68% participation share of TANC COTP entitlement which has been assigned to other TANC members. Lodi remains contractually obligated for its share to the extent not paid by the assignees. See "– Joint Powers Agency Resources – TANC California-Oregon Transmission Project."

Lodi estimates its payment obligations for debt service on its joint powers agency debt obligations aggregated approximately \$9.47 million for the fiscal year ended June 30, 2018 and are expected to aggregate approximately \$9.40 million for the fiscal year ending June 30, 2019. It should be noted that these amounts do not include any COTP amount as Lodi's share of the debt was laid off effective July 1, 2014. A portion of the joint powers agency debt obligations are variable rate debt, liquidity support for which is provided through liquidity arrangements with banks. Unreimbursed draws under liquidity arrangements supporting joint powers agency variable rate debt obligations bear interest at a maximum rate substantially in excess of the current interest rates on such obligations. Moreover, in certain circumstances, the failure to reimburse draws on the liquidity agreements may result in the acceleration of scheduled payment of the principal of such variable rate joint powers agency obligations. In connection with certain of such joint power agency obligations, the respective joint powers agency has entered into interest rate swap agreements relating thereto for the purposes of substantially fixing the interest cost with respect thereto. There is no guarantee that the floating rate payable to the respective joint powers agency pursuant to each of the interest rate swap agreements relating thereto will match the variable interest rate on the associated variable rate joint powers agency debt obligations to which the respective interest rate swap agreement relates at all times or at any time. Under certain circumstances, the swap providers may be obligated to make payments to the applicable joint powers agency under their respective interest rate swap agreement that is less than the interest due on the associated variable rate joint powers agency debt obligations to which such interest rate swap agreement relates. In such event, such insufficiency will be payable as a debt service obligation from the obligated joint powers agency members (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Lodi). In addition, under certain circumstances, each of the swap agreements is subject to early termination, in which event the joint powers agency could be obligated to make a substantial payment to

the applicable swap provider (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Lodi).

Employees

Labor Relations. As of January 1, 2019, 45 full-time City of Lodi employees were assigned specifically to the electric utility department. Contract/temporary employees are hired as necessary. Substantially all of the non-management Lodi personnel assigned to the electric utility department are represented by the International Brotherhood of Electrical Workers, Union 1245 (“IBEW”). The City’s contract with IBEW expired on December 31, 2018. Negotiations are ongoing and IBEW workers continue to provide service to Lodi Electric under the terms of the prior agreement. Despite the lack of agreement, the labor management relationship remains strong. There have been no strikes or other union work stoppages at the City of Lodi, including the electric utility department.

Pension Plans. Retirement benefits to City of Lodi employees, including those assigned to the electric utility department, are provided through the City of Lodi’s participation in the California Public Employees Retirement System (“CalPERS”), an agent multiple-employer plan administered by CalPERS, which acts as a common investment and administrative agent for participating public employers within the State. Copies of the CalPERS annual financial report may be obtained from the CalPERS Executive Office, 400 Q Street, Sacramento, California 95814.

Lodi’s defined benefit pension plans, the Miscellaneous Plan and the Safety Plan of the Lodi, provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries for all Lodi employees. Benefit provisions under the plans are established by State statute and local government resolution. No employees assigned to electric utility department participate in the Safety Plan.

Active Miscellaneous Plan members hired prior to January 1, 2013 are required to contribute 7.00% of their annual covered salary and those hired on or after January 1, 2013 are required to contribute 6.75% of their annual covered salary. Lodi’s employer contribution rate is determined annually by the actuary effective on the July 1 following notice of a change in rate. Funding contribution amounts are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Lodi is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. The actuarial methods and assumptions used are those adopted by the CalPERS Board of Administration. The City is currently undergoing a contract amendment with CalPERS for all bargaining units except IBEW. For Miscellaneous plan members, all non-IBEW employees will contribute between 1% and 3% of salary towards the City’s employer cost once the amendment is finalized. The contribution requirements of the plan members are established by State statute and the employer contribution rates are established, and may be amended, by CalPERS.

California Assembly Bill 340, the Public Employee’s Pension Reform Act (“PEPRA”), implemented new benefit formulas and final compensation periods, as well as new contribution requirements for new employees hired on or after January 1, 2013, who meet the definition of a new member under PEPRA. As of January 31, 2019, there are 13 PEPRA members in the electric utility and 32 classic members. As more PEPRA members are hired in the future, the annual normal cost of the pension plan should be reduced. Because the unfunded accrued liability of the plan is tied to current shortfalls in the pension system it is not directly impacted by the hiring of PEPRA members.

The table below sets forth Lodi’s electric utility department’s allocated share of Lodi’s required contributions to the Miscellaneous Plan for the past four fiscal years and the amount budgeted for its allocated share of the Lodi’s estimated required contributions to such plans for the current fiscal year.

City of Lodi Miscellaneous Plan

Fiscal Year Ended June 30	Electric Utility Department Allocated Share	Total City Required Contribution Amount	Contributions as a % of Covered Payroll
2015	\$ 784,603	\$2,994,958	18.07%
2016	834,026	3,500,179	20.09
2017	958,028	3,880,495	21.80
2018	1,097,633	3,950,727	21.98
2019 ⁽¹⁾	1,342,540	5,060,143	26.50

⁽¹⁾ Fiscal year 2018-19 is budgeted numbers.
Source: City of Lodi.

Lodi’s required contributions to CalPERS fluctuate each year and, as noted, include a normal cost component and a component equal to an amortized amount of the unfunded liability. Many assumptions are used to estimate the ultimate liability of pensions and the contributions that will be required to meet those obligations. The CalPERS Board of Administration has adjusted and may in the future further adjust certain assumptions used in the CalPERS actuarial valuations, which adjustments may increase Lodi’s required contributions to CalPERS in future years. Accordingly, Lodi cannot provide any assurances that Lodi’s required contributions to CalPERS in future years will not significantly increase (or otherwise vary) from any past or current projected levels of contributions. The assumptions used to determine the actuarial accrued liabilities may be found in Lodi’s most recent audited financial statements which are available on Lodi’s website at <http://www.lodi.gov>.

On December 21, 2016, the CalPERS Board of Administration voted to lower the pension plan’s assumed rate of return for purposes of its actuarial valuations from 7.5% to 7.0% by 2020 (which reduction will be phased in over the period from fiscal year 2017-18 to 2019-20). The impact of each reduction in the rate of return will be phased in over five years, with the full impact realized in the 2024-25 fiscal year. CalPERS has estimated that with a reduction in the rate of return to 7.0%, most employers could expect a 1% to 3% increase in the percentage of payroll contribution for the normal cost for miscellaneous plans. In addition, CalPERS has estimated that employers could expect gradual increases in their unfunded accrued liability payment, reaching an approximate increase in such payment (relative to the unfunded accrued liability payments projected in the June 30, 2015 valuation report) of 30% to 40% by fiscal year 2024-25 for miscellaneous plans. As a result, required contributions of employers, including Lodi, toward unfunded accrued liabilities, and as a percentage of payroll for normal costs, are expected to increase.

The City of Lodi anticipates total pension costs approximately doubling as compared to fiscal year 2017-18 during this time. To address the issue, the City has adopted a Pension Stabilization Policy (“PSP”) and created a Pension Stabilization Fund (“PSF”). As of December 31, 2018, \$10,685,926.62 was set aside in the PSF, an Internal Revenue Service Section 115(c) trust fund established for the purposes of paying future pension liabilities. The PSP requires 100% of General Fund reserves in excess of the 16% General Fund reserve target be deposited into the PSF, and all other funds invest a proportional share based on the budgeted pension obligations in that fiscal year. Based on this policy, an additional \$1,811,561 will be invested into the PSF before the end of fiscal year ending June 30, 2019. The PSP remains in effect until the funded status of the Lodi’s two pension plans for Miscellaneous and Safety employees are at a combined 80% funded status when considering the Market Value of Assets at CalPERS and in the PSF. As of the June 30, 2017 actuarial report, the funded status for the Miscellaneous Plan was 70%, Safety plan was 59.8% and combined plans was 64.9%. As of December 31, 2018, the combined funded status when considering the PSF assets increases to 67.7%. Based on fiscal year ending June 30, 2018 combined normal cost and UAL pension payments, the electric utility is responsible for approximately 11.2% of the total pension liability for the Lodi.

Effective for the fiscal year ended June 30, 2015, Lodi adopted Governmental Accounting Standards Board (“GASB”) Statement No. 68 (“GASB No. 68”), affecting the reporting of pension liabilities for accounting purposes. Under GASB 68, Lodi is required to report the Net Pension Liability (*i.e.*, the difference between the Total Pension Liability and the Pension Plan’s Net Position or market value of assets) in its financial statements.

The table below summarizes certain information relating to the Net Pension Liability of the Miscellaneous Plan as of June 30, 2014 through June 30, 2017, as reported in Lodi’s audited financial statements for the fiscal year ended June 30, 2018. The electric utility department’s allocable share of Lodi’s net pension liability was not separately determined.

City of Lodi Miscellaneous Plan			
Measurement Date⁽¹⁾ (June 30)	Net Pension Liability	Net Position as a % of Total Pension Liability	Net Pension Liability as a % of Covered Payroll
2014	\$37,725,601	77.16%	226.32%
2015	40,723,811	75.59	245.73
2016	50,998,449	70.65	292.64
2017	58,225,070	69.44	324.01

⁽¹⁾ Measured using prior fiscal year annual actuarial valuation rolled forward to measurement date using standard update procedures.

Source: City of Lodi.

As of the June 30, 2017 measurement date, the total pension liability for the Miscellaneous Plan for the City of Lodi was \$190,531,368 and the plan fiduciary net position was \$132,306,298, resulting in a city-wide Miscellaneous Plan net pension liability of \$58,225,070. In the June 30, 2016 actuarial valuation utilized for measuring the pension liability as of the June 30, 2017 measurement date, the Entry Age Normal Actuarial Cost Method was used. The actuarial valuation assumptions used for determining pension liabilities included (a) a 7.65% investment rate of return (net of pension plan investment expenses); (b) an inflation rate of 2.75% per year; and (c) a discount rate of 7.15%.

Retiree Health Benefits. Lodi also provides medical benefits to eligible city employees, including those assigned to Lodi’s electric utility department, who retire from Lodi, through the City of Lodi Other Post Employment Benefit Plan (the “OPEB Plan”), through the CalPERS healthcare programs. Lodi’s electric utility department only has miscellaneous employees participating in Lodi’s plan.

Lodi contributes the minimum provided under California Government Code Section 22825 of the Public Employees Medical and Hospital Care Act. In general, retirees must contribute any premium amount in excess of Lodi’s contribution. However, a closed group of certain active employees and retirees receive additional postemployment benefits. Certain employees hired prior to certain dates (depending on the employee bargaining unit) not later than December 6, 1995 are allowed to convert their accumulated sick leave into postemployment medical benefits as long as they have 10 or more years of service with Lodi.

Lodi’s contributions to the OPEB Plan are generally based on pay-as-you-go financing. In fiscal year 2016-17, the Lodi City Council authorized the City Manager to deposit an additional \$1,000,000 with CalPERS in an OPEB trust fund to pre-fund future benefit payments (the “OPEB Trust Fund”).

For fiscal years prior to fiscal year 2017-18, Lodi’s reported annual OPEB cost (expense) was calculated based upon the annual required contribution (“ARC”), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents the level of funding that,

if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded liabilities over a closed period not to exceed 30 years. Except as noted above in fiscal year 2016-17, contributions to the OPEB Plan have been made on a pay-as-you-go basis and Lodi did not pre-fund any portion of the plan.

The table below sets forth certain information regarding Lodi’s annual OPEB cost and the approximate portion of such amount funded by the electric utility department, the percentage of annual OPEB cost contributed and Lodi’s Net OPEB obligation for the three fiscal years 2014-15 through 2016-17.

City of Lodi OPEB Plan				
Fiscal Year Ended June 30	Annual OPEB Cost	Amount Funded by Electric Utility	% of Annual OPEB Cost Contributed⁽¹⁾	Net OPEB Obligation
2015	\$1,276,201	\$134,344	54.83%	\$5,343,727
2016	3,024,169	184,903	26.70	7,560,300
2017	3,150,716	219,010	56.24 ⁽¹⁾	8,939,061

⁽¹⁾ As noted above, in fiscal year 2016-17 Lodi made an additional \$1,000,000 contribution to the OPEB Trust Fund.
Source: City of Lodi.

Effective for fiscal year 2017-18, Lodi follows the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (“GASB No. 75”) affecting the reporting of OPEB liabilities for accounting purposes. GASB No. 75 replaces the requirements of GASB Statement No. 45. GASB No. 75 establishes standards for employers with other postemployment liabilities for recognizing and measuring net OPEB liabilities, along with deferred inflows and outflows of resources, and expenses/expenditures related to the other postemployment liability. GASB No. 75 does not establish requirements for funding.

For fiscal year 2017-18, Lodi contributed \$2,947,260 to its OPEB Plan, of which \$1,000,000 was placed in the OPEB trust fund. The electric utility department’s allocated share of Lodi’s fiscal year 2017-18 contribution was \$211,267. The amount budgeted for Lodi electric utility department’s share of OPEB Plan contributions for fiscal year 2018-19 is \$216,650.

Pursuant to GASB No. 75, for the fiscal year ended June 30, 2018, Lodi reported a net OPEB liability of \$33,275,362 (reflecting a total OPEB liability of \$34,354,842 and a fiduciary net position of \$1,079,480 for the OPEB Plan). The net OPEB liability as a percentage of covered-employee payroll was 94.23%. The OPEB Plan Net Position as a percentage of Lodi’s total OPEB liability was 3.14%. The net OPEB liability was measured as of June 30, 2017 and the total OPEB liability used to calculate the net OPEB liability was determined by a June 30, 2017 actuarial valuation, based on actuarial methods and assumptions. The actuarial assumptions include: (a) a 6.73% investment rate of return; (b) payroll growth of 3.00%; (c) a 2.75% inflation rate; (d) an annual health care cost trend rate of 6.8% initially, reducing in decrements to 4.40%; and (e) a discount rate of 3.60%.

Additional information regarding the City of Lodi’s retirement plans and other post-employment benefits can be found in the City’s comprehensive annual financial reports, which may be obtained at <http://www.lodi.gov>.

Insurance

Lodi’s boiler and machinery operations (including those parts of the electric system) are insured by Hartford Steam Boiler for up to \$39,986,075 in coverage. Lodi (including the electric system), is self-insured for general liability losses for up to \$500,000 and has pooled excess coverage through the California

Joint Powers Risk Management Authority for up to \$40 million per occurrence. Lodi (including the electric system) is self-insured for workers' compensation losses for up to \$250,000 and has excess coverage through the Local Agency Workers' Compensation Excess Joint Powers Authority for statutory coverage.

Litigation

There is no action, suit or proceeding known to be pending or threatened, restraining or enjoining Lodi in the execution or delivery of, or in any way contesting or affecting the validity of any proceedings of Lodi taken with respect to the Third Phase Agreement.

There is no litigation pending, or to the knowledge of Lodi, threatened, questioning the existence of Lodi, or the title of the officers of Lodi to their respective offices. There is no litigation pending, or to the knowledge of Lodi, threatened, questioning or affecting in any material respect the financial condition of Lodi's electric system.

Present lawsuits and other claims against Lodi's electric system are incidental to the ordinary course of operations of the electric system and are largely covered by Lodi's self-insurance program. In the opinion of Lodi's management and the Lodi City Attorney, such claims and litigation will not have a materially adverse effect upon the financial position of Lodi.

Lodi's Operations Since Industry Restructuring

Since the deregulation of the California energy markets, Lodi has implemented revenue enhancements, cost containment measures and changes in operating procedures to help mitigate financial risks associated with changes in market power costs. See "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings" in the front part of this Remarketing Memorandum. These actions include:

- **Energy Cost Recovery.** Implemented an ECA for all customers. This rate action guarantees coverage of bulk power purchase costs. See "– Rates and Charges" above.
- **Risk Management Program.** Lodi established an Energy Risk Management Policy, most recently updated in September 2018. Consistent with the policy Lodi has established guidelines which provide a time and price triggered tier approach to closing open positions as long as 5 years into the future. The table below illustrates this approach:

Month	Covered Position As % of Forecasted Load				
0 designates current month	>60 th	60 th	50 th -Median	25 th	<25 th
1-3	80-85%	85-90%	90%	90%	90%
3+	80-85%	85%	85-90%	90%	90%
6+	70-75%	75-80%	80-85%	85-90%	90%
9+	60-65%	65-70%	70-75%	75-80%	80%
12+ months	60-65%	65-70%	70-75%	75-80%	80%

The above guidelines are under review to expand hedging efforts when forecasted prices are historically low to mitigate future price risk/volatility.

The Energy Risk Management Policy applies to all aspects of Lodi's wholesale procurement and sales activities, long-term contracting associated with energy supplies, and associated financing related to generation, transmission, transportation, storage, Renewable Energy Credits (RECs), Greenhouse Gas

(GHG) offsets, Resource Adequacy (RA) capacity, ancillary services and participation in Joint Powers Agencies (JPAs).

Significant Accounting Policies

Lodi's most recent CAFR for the fiscal year ended June 30, 2018 was audited by The Pun Group, Walnut Creek, California, in accordance with generally accepted auditing standards, and contains opinions that the financial statements present fairly the financial position of the various funds maintained by Lodi. The reports include certain notes to the financial statements which may not be fully described below. Such notes constitute an integral part of the audited financial statements. Copies of these reports are available on request from the City of Lodi, Finance Department, 310 West Elm Street, Lodi, California 95240. Governmental accounting systems are organized and operated on a fund basis. A fund is defined as an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein. Funds are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions or limitations.

The electric system is accounted for as an enterprise fund. Enterprise funds are used to account for operations (i) that are financed and operated in a manner similar to private business enterprises (where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges) or (ii) where the governing body has decided that periodic determination of revenues earned, expenses incurred and/or net income is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

The accounting policies of Lodi conform to generally accepted accounting principles (GAAP) as applicable to governments.

Condensed Operating Results and Selected Balance Sheet Information

The following table sets forth summaries of operating results and selected balance sheet information of Lodi's electric utility for the five fiscal years 2013-14 through 2017-18. The information for the fiscal years ended June 30, 2014 through June 30, 2018 was prepared by Lodi on the basis of its audited financial statements for such years.

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CITY OF LODI
ELECTRIC UTILITY DEPARTMENT
SUMMARY OF OPERATING RESULTS AND SELECTED
BALANCE SHEET INFORMATION⁽¹⁾
(\$ in 000s)

	Fiscal Year ended June 30,				
	2014	2015	2016	2017	2018
OPERATING REVENUES:					
Rate Revenue	\$ 61,837	\$63,370	\$ 65,265	\$ 64,114	\$ 65,054
ECA Revenue	2,856	1,867	2,242	1,734	4,192
Other Revenue	2,451	1,895	2,933	1,967	3,495
Total Operating Revenues	<u>67,144</u>	<u>67,132</u>	<u>70,440</u>	<u>67,815</u>	<u>72,741</u>
OPERATING EXPENSES:					
Purchased Power ⁽²⁾	37,303	38,512	37,788	35,650	39,519
Non-Power Costs ⁽³⁾	13,046	13,604	13,417	16,609	16,422
Total Operating Expenses	<u>50,349</u>	<u>52,116</u>	<u>51,205</u>	<u>52,259</u>	<u>55,941</u>
NET REVENUE					
AVAILABLE FOR DEBT					
SERVICE:					
	16,795	15,016	19,235	15,557	16,800
Debt Service	<u>8,356</u>	<u>8,318</u>	<u>8,289</u>	<u>5,288</u>	<u>5,298</u>
Remaining After Debt Service	<u>8,439</u>	<u>6,698</u>	<u>10,946</u>	<u>10,268</u>	<u>11,502</u>
OTHER REVENUES					
(EXPENSES):					
Greenhouse gas allowance	453	2,323	1,571	2,370	2,262
Payments in Lieu of Taxes	<u>(6,977)</u>	<u>(7,033)</u>	<u>(7,082)</u>	<u>(7,131)</u>	<u>(7,159)</u>
Net Cash Flow Before Capital Expenditure	<u>\$ 1,915</u>	<u>\$ 1,988</u>	<u>\$ 5,435</u>	<u>\$ 5,507</u>	<u>\$ 6,586</u>
SELECTED BALANCE SHEET INFORMATION:					
Net Plant in Service	\$ 8,950	\$ 8,585	\$ 8,271	\$ 7,957	\$ 7,808
Land and Construction Work in Progress	\$ 764	\$ 764	\$ 764	\$ 764	\$ 764
Long-Term Debt	\$71,288	\$66,303	\$61,084	\$58,669	\$48,291
Debt Service Coverage Ratio ⁽¹⁾	2.01	1.81	2.32	2.94	3.17

(1) Figures shown are calculated in accordance with the documents pursuant to which Lodi's outstanding electric system revenue obligations were issued, which may or may not be on the same basis as Generally Accepted Accounting Principles. See "– Indebtedness; Joint Powers Agency Obligations." Operating Revenues do not include greenhouse gas allowance revenues used to pay eligible Operating Expenses. Debt Service Coverage Ratio does not include greenhouse gas allowance revenues and does not include Available Reserves as permitted by the documents pursuant to which Lodi's outstanding electric system revenue obligations were issued. As of June 30, 2018, Lodi's Available Reserves, including reserves held locally and reserves available at NCPA, totaled approximately \$26.573 million.

(2) Purchased Power includes joint powers agency payment obligations.

(3) Non-power costs include costs of services provided by other departments and does not include depreciation and amortization expense.

Source: City of Lodi.

CITY OF PALO ALTO

Introduction

The City of Palo Alto (“Palo Alto”) is a charter city of the State of California. Pursuant to the California Constitution, Palo Alto’s City Charter, and its municipal code, Palo Alto has the power to furnish electric utility service to its inhabitants. In connection therewith, Palo Alto has the powers of eminent domain, to contract, to construct works, to fix rates and charges for commodities or services furnished and to incur indebtedness.

Palo Alto provides electric and other utility services through its department of utilities (the “Department of Utilities”). The legal responsibilities and power of the Department of Utilities, including the establishment of rates and charges, are exercised through the seven-member Palo Alto City Council. The members of the City Council are elected citywide for staggered four-year terms. The Palo Alto Department of Utilities is under the direction of the General Manager of Utilities who is accountable to the City Manager and who is appointed by the City Manager with the approval of the City Council.

Since 1900, Palo Alto has provided all electric service within the City of Palo Alto. For the fiscal year ended June 30, 2018, Palo Alto served 29,513 customers, had total sales of approximately 900 million kWh and a peak demand of 182 MW.

To provide electric service within its service area, Palo Alto owns and operates an electric system which includes power supply resources and transmission and distribution facilities. Palo Alto also purchases power and transmission services from others and participates in pooling and other utility type arrangements. In addition, Palo Alto provides gas utility and other normal city services to its inhabitants such as police and fire protection and water and sewer service.

In 2011, the California Legislature passed Senate Bill X1-2 (“SBX1-2”), the “California Renewable Energy Resources Act.” SBX1-2 requires local publicly-owned utilities to adopt and implement a renewable energy resource procurement plan to achieve specified targets for serving their retail energy loads from eligible renewable energy resources.

In March 2011, the Palo Alto City Council approved the updated Long-Term Electric Acquisition Plan (“LEAP”) Objectives, Strategies and Implementation Plan. LEAP provides high level policy direction for the pursuit of energy efficiency, demand resources, renewable energy, local generation and transmission resources. LEAP also sets direction for the management of hydroelectric resources and market exposure uncertainty. LEAP was updated in March and April 2012 to include revisions related to Palo Alto’s energy storage targets and Renewable Portfolio Standard (“RPS”).

In 2013, the Palo Alto City Council approved a Carbon Neutral Electric Resource Plan (the “Carbon Neutral Plan”), which defined carbon neutrality for Palo Alto’s electric portfolio, demonstrated a transparent and verifiable protocol to measure carbon content and established a goal to achieve carbon neutrality by the end of 2013. As a result, Palo Alto has neutralized all greenhouse gas emissions associated with the City’s electric portfolio since 2013, putting the City of Palo Alto on track to achieve its Sustainability and Climate Action Plan greenhouse gas emission reduction goal of 80% emissions reduction from 1990 levels by 2030. See “– Future Power Supply Resources – *Carbon Neutral Plan*” below.

In 2015, the California Legislature passed Senate Bill 350 (“SB 350”), the “Clean Energy and Pollution Reduction Act of 2015.” SB 350 increased California’s renewable electricity procurement goal from 33% by 2020 to 50% by 2030 based on RPS-eligible resources. SB 350 also requires Palo Alto to develop and submit an Integrated Resource Plan for the electric utility every four years, with the first

required to be adopted by the Palo Alto City Council by January 1, 2019. In 2018, the California Legislature passed Senate Bill 100 (“SB 100”), the “100 Percent Clean Energy Act of 2018.” SB 100 accelerates the State’s RPS target as established by SB 350 from 50% by 2030 to 60% by 2030 and sets a goal of 100% “clean energy” by the year 2045. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings” in the front part of this Remarketing Memorandum for more information on SB 350 and SB 100.

In 2017, Palo Alto kicked-off a process to develop its Electric Integrated Resource Plan (“EIRP”) for the 2019 to 2030 planning horizon. The EIRP updates LEAP and maps out Palo Alto’s long-term plan for achieving its electric energy, capacity and reliability needs through the use of distributed energy resources (“DER”), such as energy efficiency and solar photovoltaics, and carbon neutral supply resources. The EIRP was approved by the Palo Alto City Council in December 2018, and will be submitted to the California Energy Commission (the “CEC”) in early 2019. The document will serve as the City’s Integrated Resource Plan for the purpose of meeting California’s integrated resource planning compliance requirements for local publicly-owned utilities under SB 350.

Palo Alto has a comprehensive Energy Risk Management Program governing electric and natural gas transactions. The program consists of the Palo Alto City Council approved policies, and operational guidelines approved by Palo Alto City’s Risk Oversight and Coordination Committee. The Energy Risk Management Program segregates commodity purchase and sale functions related to the front, middle and back offices.

Only the revenues of the Palo Alto electric utility will be available to pay amounts owed by Palo Alto under the Third Phase Agreement.

The main offices of the City of Palo Alto Department of Utilities are located at 250 Hamilton Avenue, 3rd Floor, Palo Alto, California 94301 (650) 329-2161. For more information about Palo Alto and its Department of Utilities, contact Dean Batchelor, Acting General Manager of Utilities, at the above address and telephone number. A copy of the most recent comprehensive annual financial report of the City of Palo Alto (the “Annual Report”) is available on Palo Alto’s website at <http://www.cityofpaloalto.org> and on the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access system at <http://emma.msrb.org/>. The Annual Report is incorporated herein by this reference. However, the information presented on such website or referenced therein other than the Annual Report is not part of this Remarketing Memorandum and is not incorporated by reference herein.

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Power Supply Resources

The following table sets forth information concerning Palo Alto’s power supply resources and the energy supplied by each during the fiscal year ended June 30, 2018.

**CITY OF PALO ALTO
DEPARTMENT OF UTILITIES
POWER SUPPLY RESOURCES
For the Fiscal Year Ended June 30, 2018**

Source	Capacity Available (MW)	Actual Energy (GWh)	Percent of Total Energy
Purchased Power:			
Western	186	357	38%
Wind Energy	25	98	10
Landfill Gas Energy	14	108	11
Solar Energy	127	346	37
Forward Market Purchases ⁽¹⁾	40	(88)	(9)
NCPA			
Geothermal Project ⁽²⁾	--	--	--
Hydroelectric Project	58	113	12
Seattle City Light Exchange ⁽³⁾	--	--	--
Short-Term Market Purchases	--	9	1
Total	N/A ⁽⁴⁾	943	100%

⁽¹⁾ See “– Purchased Power – *Other Power Purchases*” below.

⁽²⁾ Capacity and energy sold to Turlock Irrigation District. See “– Joint Powers Agency Resources – *NCPA*” below.

⁽³⁾ Assigned to City of Santa Clara effective June 2008. Contract terminated in May 2018. See “– Joint Powers Agency Resources – *NCPA*” below.

⁽⁴⁾ Capacity availability varies by season and is not necessarily additive at any given time.

Source: City of Palo Alto.

In the fiscal year ended June 30, 2018, Palo Alto’s average cost of power delivered to the Palo Alto electric system was approximately 9.1 cents per kWh.

Purchased Power

Western. Palo Alto receives a substantial portion of its supply of power from the Central Valley Project (“CVP”) pursuant to a contract with the Western Area Power Administration (“Western”).

In October 2000, Palo Alto signed a 20-year agreement with Western (the “Western Base Resource Contract”) for the continued purchase of hydroelectricity from the CVP. Service under such Western Base Resource Contract began on January 1, 2005 and continues through 2024, with Palo Alto receiving an 11.620% “slice of the system” allocation from Western. On January 1, 2015, Palo Alto’s allocation increased to 12.309%. The power marketed by Western to Palo Alto is provided on a take-or-pay basis where Western’s annual costs are allocated to preference customers based on their CVP participation percentage. Western then allocates the annual take-or-pay charges to the preference customers based on a monthly percentage that is designed to reflect the anticipated seasonal energy deliveries. Palo Alto is obligated to its preference customer share of the costs associated with operating the CVP facilities. Palo Alto’s energy allocation under the current Western Base Resource Contract

starting in January 2005 is approximately 365 GWh/year in an average hydrological year. Palo Alto's annual cost obligation under the Western Base Resource Contract is approximately \$14 million per year, resulting in an average cost of approximately \$38 per MWh in an average hydrological year.

Wind Energy Contracts. Palo Alto currently has two long-term contracts for the output of wind electricity generation. Under a contract with Avangrid Renewables (formerly Iberdrola Renewables and PPM Energy, Inc.) ("Avangrid"), for power from the High Winds I project (owned by NextEra Energy Resources, LLC (formerly FPL Energy, LLC)) in Solano County, Palo Alto is allocated available capacity of 20 MW and acquired a fixed unit price on expected generation of 43 GWh/year. The term of the High Winds I contract ends in 2028. Under a separate contract with Avangrid, for power from the Shiloh I project (owned by Iberdrola Renewables) in Solano County, Palo Alto is allocated available capacity of 25 MW and acquired a fixed unit price on expected generation of 56 GWh/year. The term of the Shiloh I contract ends in 2021.

Landfill Gas Energy Contracts. Palo Alto currently has five long-term contracts for the output of landfill gas electricity generation under separate contracts with Ameresco, Inc. Under the first contract with Ameresco Santa Cruz Energy, L.L.C., for power from the Santa Cruz project (at a landfill owned by County of Santa Cruz) in Watsonville, California, Palo Alto is allocated available capacity of 1.5 MW and acquired an initial fixed per-unit price with 1.5% annual increases on expected generation of 9.0 GWh/year. The Santa Cruz project began commercial operation in February 2006 and its contract term ends in 2026. Under a second contract with Ameresco Half Moon Bay, L.L.C., for power from the Ox Mountain project (at a landfill owned by Republic Services, Inc.) in Half Moon Bay, California, Palo Alto is allocated available capacity of 5.1 MW and acquired an initial fixed per-unit price with 1.5% annual increases on expected generation of 42.5 GWh/year. The Ox Mountain project began commercial operation in April 2009 and its contract term ends in 2029. Under a third contract with Ameresco Keller Canyon, L.L.C., for power from the Keller Canyon project (at a landfill owned by Republic Services) in Pittsburg, California, Palo Alto is allocated available capacity of 1.5 MW and acquired an initial fixed per-unit price with 1.5% annual increases on expected generation of 13.8 GWh/year. The Keller Canyon project began commercial operation in August 2009 and its contract term ends in 2029. Under a fourth contract with Ameresco Johnson Canyon, L.L.C., for power from the Johnson Canyon project (at a landfill owned by Salinas Valley Solid Waste Authority) in Gonzales, California, Palo Alto is allocated available capacity of 1.4 MW and acquired an initial fixed per-unit price with 1.5% annual increases on expected generation of 9.2 GWh/year. The Johnson Canyon project began commercial operation in May 2013 and its contract term ends in 2033. Under a fifth contract with Ameresco San Joaquin, L.L.C., for power from the San Joaquin project (at a landfill owned by San Joaquin County) in Linden, California, Palo Alto is allocated available capacity of 4.3 MW and acquired an initial fixed per-unit price with 1.5% annual increases on expected generation of 27.5 GWh/year. The San Joaquin project began commercial operation in April 2014 and its contract term ends in 2034.

Palo Alto expects to receive a total of 102 GWh from these five landfill gas projects, representing approximately 11% of Palo Alto's load. Each of the foregoing landfill gas energy contracts is unit contingent.

Solar Energy Contracts. Palo Alto currently has six long-term contracts for the output of solar electricity generation under separate contracts with three different parent companies. The first three contracts are with the Sustainable Power Group (sPower): the 26.656 MW Hayworth Solar project in Kern County, and the 40 MW Elevation Solar C and 20 MW Western Antelope Blue Sky Ranch B projects in Los Angeles County. These three contracts all feature fixed per-unit prices and produce expected generation of 52 GWh/year, 101 GWh/year, and 50.5 GWh/year, respectively. The terms of such contracts all end in 2041. Palo Alto also has two solar energy contracts with Clēnera: the 20 MW Frontier Solar project in Stanislaus County, and the 20 MW EE Kettleman Land project in Kings County. Both of these contracts feature fixed per-unit prices and produce expected generation of 52.5 GWh/year

and 53.5 GWh/year, respectively. The term of the Frontier Solar contract ends in 2046, while that of the EE Kettleman Land contract ends in 2040. Finally, Palo Alto has a contract with Hecate Energy for a 26 MW project that is still in the development stages. This contract, for a fixed per-unit price, has a 25-year contract term, and is expected to begin in 2021.

Palo Alto expects to receive a total of 330 GWh from the five operating solar energy projects, representing approximately 35% of Palo Alto's load. Each of the foregoing solar energy contracts is unit contingent.

Other Power Purchases. Palo Alto has nine active Master Agreements with BP Energy, Shell Energy North America, Powerex Corp, Cargill Power Markets, Exelon Generation, Avangrid, NextEra Energy Marketing, Turlock Irrigation District ("TID"), and PacifiCorp to facilitate competitive forward market purchases to meet Palo Alto's loads in the short- to medium-term. As of June 30, 2018, Palo Alto had outstanding electricity purchase commitments for the period July 2018 to June 2020 totaling 92 GWh, and sales commitments for this period totaling 82 GWh. These market-based purchases and sales are made within the parameters of Palo Alto's Energy Risk Management Program.

In fiscal year 2017-18, gross market-based purchases provided approximately 18% of Palo Alto's energy needs, while gross market-based sales equaled 21% of Palo Alto's energy needs. The volume of market purchases and sales however is highly dependent on hydrologic conditions and long-term commitments to renewable resource based supplies. During normal hydrologic conditions, gross market purchases are expected to meet approximately 18% of energy needs, while gross market sales are expected to amount to approximately 26% of energy needs. All purchase transactions and sales-incidental-to-purchases are designed to meet native load. NCPA serves as Palo Alto's scheduling and billing agent for all transactions, and acts as the interface with the California Independent System Operator ("CAISO") under the Second Amended and Restated Metered Subsystem Aggregation Agreement (the "MSSA"). See "NORTHERN CALIFORNIA POWER AGENCY – NCPA Power Pool" in the front part of this Remarketing Memorandum.

Joint Powers Agency Resources

NCPA. Except for a small 4.5 MW generator within the City of Palo Alto, Palo Alto does not independently own any generation assets. In addition to purchasing power from other sources, Palo Alto is a participant in certain NCPA projects. Palo Alto has purchased from NCPA a 22.920% entitlement share in the NCPA Hydroelectric Project and a 6.158% entitlement share in the NCPA Geothermal Project. In 1984, Palo Alto permanently assigned its share of the Geothermal Project to TID on a take-or-pay basis for the life of the plant, since Palo Alto's need for base load generation at the time the sale was made was limited. Palo Alto remains, however, secondarily liable for payment of project costs not paid by TID. For each of these NCPA projects in which Palo Alto participates, Palo Alto is obligated to pay, on an unconditional take-or-pay basis, as an operating expense of the Palo Alto electric system, its entitlement share of the debt service on NCPA bonds issued for the project, as well as its share of the operation and maintenance expenses of the project. See also "– Indebtedness; Joint Powers Agency Obligations" below.

In addition, in 1992, NCPA entered into an agreement with Seattle City Light to provide for a seasonal power exchange. The agreement entitled Palo Alto to 11 MW (10.3 MW at Palo Alto's meter) during the summer and obligated it to return 8 MW (at Palo Alto meter) during the winter. Deliveries under this agreement began June 1, 1995. Changes in Palo Alto's electric portfolio needs and wholesale market conditions led Palo Alto to assign its full share and obligations in the Seattle City Light exchange to the City of Santa Clara effective June 2008. The NCPA-Seattle City Light agreement was terminated effective on May 31, 2018.

For a description of such NCPA resources, see “THE HYDROELECTRIC PROJECT” and “OTHER NCPA PROJECTS” in the front part of this Remarketing Memorandum.

TANC California-Oregon Transmission Project. Palo Alto is also a member of the Transmission Agency of Northern California (“TANC”) and has a participation share of 4.00% (net of layoffs) of TANC’s entitlement to transfer capability (approximately 50 MW) of the California-Oregon Transmission Project (“COTP”) and is responsible for 4.032% of TANC’s COTP operating and maintenance expenses and 4.00% of TANC’s aggregate debt service. As a result of low utilization on Palo Alto’s part of the transmission capacity and therefore low value relative to costs, in addition to a focus on acquiring in-state renewable resources, in August 2008 Palo Alto effected a long-term assignment of its full share and obligations in COTP to Sacramento Municipal Utility District (“SMUD”), TID and Modesto Irrigation District (“MID”). The long-term assignment is for 15 years with an option to renew for five years. In March 2016, TANC restructured the long-term debt associated with COTP extending the debt through the end of 2039. Palo Alto’s layoff recipients, SMUD, TID and MID, through an amendment to the assignment agreement, agreed to extend the term of the payments under the assignment agreement to continue to pay Palo Alto’s portion of the COTP debt during the term of the term of the COTP bonds. For a further description of the TANC COTP project, see “CITY OF SANTA CLARA – Transmission Resources – *TANC California-Oregon Transmission Project.*”.

Distributed Energy Resources

Distributed energy resources include generation, storage, demand response, and energy efficiency on the distribution system which can change the shape and timing of energy use. Palo Alto has undertaken a comprehensive process to plan to maximize the value of distributed energy resources and is reviewing a coordinated Distributed Energy Resources Plan. In addition, Palo Alto’s Electric and Gas Public Benefits and Water Efficiency Programs include programs related to efficiency, renewable energy, low-income discounts, and research, development and demonstration (RD&D) of emerging technologies. Due to increasing supply costs, significant new regulatory requirements, and Palo Alto’s desire to promote environmental stewardship, Palo Alto has placed an increased emphasis on energy and water efficiency. Palo Alto continues to pursue cost-effective energy efficiency as a priority in reducing customer bills. Both the EIRP and Palo Alto’s Ten-Year Electric Energy Efficiency Goals (2018-2027) affirm that cost-effective energy efficiency remains Palo Alto’s highest priority energy resource, given that energy efficiency typically displaces relatively expensive electricity generation, lowers energy bills for customers, and contributes to economic development and job creation. The Gas Utility Long-Term Plan (“GULP”) also includes energy efficiency as an important contributor to the energy plan.

Energy Efficiency Savings Goals and Achievements. California Assembly Bill 2021 (“AB 2021”) required all local publicly-owned utilities to identify all potentially achievable cost-effective electric efficiency savings and to establish annual targets for energy efficiency (“EE”) savings over ten years, with the first set of EE targets to be reported to the CEC on or before June 1, 2007, and updated every three years thereafter. California Assembly Bill 2227 passed in 2012 amended this target, setting the schedule to every four years. Palo Alto adopted its first Ten-Year Energy Efficiency Portfolio Plan in April 2007, which included annual electric and gas efficiency targets between 2008 and 2017, with a ten-year cumulative savings goal of 3.5% of the forecasted energy use. In accordance with California law, the electric efficiency targets were updated in 2010, with the ten-year cumulative savings goal doubling to 7.2% between 2011 and 2020. Since then, increasingly stringent statewide building code and appliance standards have resulted in substantial energy savings. However, these “codes and standards” energy savings cannot be counted toward meeting the utility’s EE goals. The ten-year electric efficiency targets were updated again in 2012, with the ten-year cumulative electric efficiency savings being revised downward to 4.8% between 2014 and 2023.

In 2015, SB 350 mandated the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030, with cost-effective utility energy efficiency programs as one component. In February 2017, City Council adopted the current set of Ten-Year Electric Efficiency Goals, updating the ten-year cumulative electric efficiency savings target to 5.7% between 2018 and 2027. For fiscal year 2017-18, the electric utility achieved electric savings of 0.66% of load through its customer efficiency programs. Cumulative electric efficiency savings since 2006 are approximately 6% of the fiscal year 2017-18 electric usage.

In parallel to the development of Ten-Year Electric Efficiency Goals, Palo Alto adopted its first set of gas efficiency targets in 2007 to reduce gas consumption by 3.5% between 2008 and 2017. In 2010, the gas efficiency targets were updated to reduce use by 5.5% between 2011 and 2020. Similar to the electric side, gas efficiency potential has declined due to recent changes to California's appliance standards and building codes. The ten-year electric efficiency targets were updated again in 2012, with the ten-year cumulative gas efficiency savings being revised downwards to 2.85% between 2014 and 2023. In March 2017, the Palo Alto City Council adopted its current set of Ten-Year Gas Efficiency Goals, updating the ten-year cumulative gas efficiency savings target to 5.1% between 2018 and 2027. For fiscal year 2017-18, the gas utility achieved gas efficiency savings of 0.9% of total gas sales. Cumulative gas efficiency savings since 2006 is about 5.6% of the fiscal year 2017-18 gas usage.

Local Solar Plan. In April 2014, the Palo Alto City Council passed the Local Solar Plan, which set the city-wide goal of meeting 4% of Palo Alto's energy needs from local solar by 2023 and identified a number of strategies to facilitate achieving that goal. These strategies include the development of several solar programs to encourage installation of roof-top solar, such as the existing incentives of the feed-in tariff program and the PV Partners solar rebate program (described below). As of June 2018, all solar installations within the City of Palo Alto generate approximately 2.0% of Palo Alto's annual electricity (from 11.8 MW of installed local solar capacity).

Customer-side Renewable Generation Programs. The following is a description of Palo Alto's customer-side renewable generation programs:

PV Partners: The PV Partners Program encourages photovoltaic or solar electric ("PV") installations on Palo Alto homes and businesses by providing a rebate based on the capacity, measured in watts, of newly installed PV systems. The PV Partners Program continues to be one of the most successful in the State. Rebate funds were fully reserved in April 2016. The effect of the PV Partners program is illustrated by the cumulative total of PV installations under the program. As of June 30, 2018, there were 1,081 PV installations with the total capacity of 10.18 MW (5.6% of Palo Alto's system peak load) that were installed under the PV Partners Program.

Net-Energy Metering Successor Program: Prior to January 1, 2018 residential and commercial customers in Palo Alto who installed approved PV systems were able to sign up for the Palo Alto Net Energy Metering ("NEM") program. Palo Alto reached the NEM cap of 10.8 MW in January 2018 and Palo Alto is now offering a NEM Successor Program instead. The NEM Successor process is integrated with the permitting process, and customers receive a credit for electricity exported to the grid based on Palo Alto's avoided costs.

Palo Alto CLEAN (Clean Local Energy Accessible Now): This feed-in tariff program (referred to as "Palo Alto CLEAN") purchases electricity generated by renewable energy resources located in Palo Alto's service territory and interconnected on the utility-side of the electric meter. The electricity is purchased by Palo Alto for credit to its RPS. The program was launched in 2012 and has been modified over the past few years. On February 3, 2014, the Palo Alto City Council approved a total program capacity of 3 MW at a price of 16.5 cents per kilowatt hour (kWh) fixed for 20 years. On May 8, 2017, the Palo Alto City Council approved

minor changes to Palo Alto CLEAN such that the program no longer has a total participation cap for either solar or non-solar eligible renewable energy resources. Palo Alto is currently offering to purchase the output of eligible renewable electric generation systems located in Palo Alto at the following prices:

- For solar energy resources: 16.5 cents per kilowatt hour (“¢/kWh”) for a 15-, 20- or 25-year contract term until the subscribed capacity reaches 3 MW; thereafter, the price will drop to 8.8¢/kWh for a 15-year contract term, 8.9¢/kWh for a 20-year contract term, or 9.1¢/kWh for a 25-year contract term; and
- For non-solar eligible renewable energy resources: 8.3¢/kWh for a 15-year contract term, 8.4¢/kWh for a 20-year contract term, or 8.5¢/kWh for a 25-year contract term.

There is no minimum or maximum project size, but the program is best suited for commercial property owners with available roof-tops or parking lots. Palo Alto’s Public Works Department recently solicited proposals to install solar PV systems and electric vehicle chargers at four City-owned parking structures. All four City-owned parking garage solar PV systems became operational as of March 2018. As of February 2019, there are a total of six solar PV systems participating in the Palo Alto CLEAN program, including the four aforementioned systems on City-owned parking garages. These six projects account for 2.915 MW of the capacity available at the 16.5¢/kWh contract rate and all are [expected to be] online by April 2019, with contract terms ranging from 15 to 25 years. *{update?}*

Solar Hot Water Program: Palo Alto launched its solar water heating program in May 2008, in advance of a State law requiring natural gas utilities to offer incentives. This program offers rebates of up to \$2,719 for residential systems and up to \$100,000 for commercial and industrial systems. A sample set of installations are inspected for quality and program compliance by an independent contractor. The program was recently extended through 2020. A total of 63 systems have been installed as of June 30, 2018; 57 of these are residential. From 2008 to 2018, \$411,733 in rebates was disbursed. In fiscal year 2017-18, this program resulted in annual energy savings of 24,786 therms and 13,387 kWh.

Future Power Supply Resources

Carbon Neutral Plan. In March 2013, the Palo Alto City Council approved its Carbon Neutral Plan committing Palo Alto to using carbon neutral electric resources beginning in calendar year 2013. The plan also provides that such resource portfolio adjustments should not result in a rate increase of more than 0.15¢/kWh (equivalent to about \$1.00/month for an average residential bill).

Palo Alto’s current renewable energy resource policy targets a 50% resource portfolio share by 2030. The policy also provides that such resource portfolio adjustments should not result in a rate increase of more than 0.5¢/kWh (equivalent to about \$3.35/month for an average residential bill). Palo Alto also permits its commercial customers to voluntarily participate in a green power program whereby participating customers can elect to pay a premium through their electric rates to purchase renewable energy certificates through Palo Alto for all or a portion of their energy needs.

In accordance with LEAP and the Carbon Neutral Plan, Palo Alto has entered into a number of electricity purchase contracts to meet its resource requirements as described above. As of December 31, 2018, Palo Alto had procured approximately 107% of its total projected electricity needs for fiscal year 2019-20 (assuming the projected hydroelectric production).

Palo Alto satisfied the RPS target under SBX1-2 for Compliance Period 1 (from 2011 through 2013), with an average of approximately 21.3% of Palo Alto's energy portfolio supplied from renewable resources over such period. Palo Alto has also satisfied the RPS target for Compliance Period 2 (from 2014 through 2016), meeting the compliance requirement of 20% of retail sales in 2014 and 2015, and 25% of retail sales in 2016. Palo Alto further expects to satisfy the RPS target under SBX1-2 for Compliance Period 3 (from 2017 through 2020). As of February 2019, Palo Alto has sufficient hydroelectric and renewable generation contracts to provide enough energy to supply its entire load (assuming average hydrologic conditions). *{any change?}* See also "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings" in the front part of this Remarketing Memorandum for more information on SBX1-2.

Going forward, Palo Alto expects to meet its energy needs through energy efficiency and other distributed energy resources, existing hydroelectric generation and renewable resources and additional renewable generation contracts which are expected to be on line in 2021. Palo Alto will continue to procure energy supplies to meet Palo Alto's short and medium-term energy needs through market purchases with Palo Alto's pre-selected suppliers.

Interconnections, Transmission and Distribution Facilities

Palo Alto's electric system is directly interconnected with the system of Pacific Gas and Electric Company ("PG&E") by a single 115 kV delivery point at Palo Alto's Colorado substation. Palo Alto receives transmission services under the MSSA between NCPA and the CAISO. See also "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – PG&E Bankruptcy" in the front part of this Remarketing Memorandum.

Palo Alto's distribution system consists of the 115 kV to 60 kV delivery point, two 60 kV switching stations, 9 distribution substations, approximately 12 miles of 60 kV sub transmission lines, and approximately 469 miles of 12 kV and 4 kV distribution lines including 223 miles of overhead lines and 245 miles of underground lines.

The service area of the Palo Alto electric system is coterminous with the municipal boundaries of the City of Palo Alto. A portion of the area within the City limits, west of Highway 280 and known as the "Foothills" area, is in a State-designated high fire threat area. On August 20, 2018, pursuant to the requirements of California Senate Bill 1028, the Palo Alto City Council made a wildfire risk determination with respect to the Foothills area. The Palo Alto electric utility has in place a number of mitigation measures aimed at reducing the risk of a wildfire occurrence being caused by its overhead electrical lines and equipment, which were approved by the City Council in connection with its wildfire risk determination. These measures include: periodic inspection of overhead electric facilities, ongoing vegetation clearance and management activities, and the elimination of the automatic restoration function in the Foothills to require that power to a tripped line is only restored after manual inspection and confirmation that it may be operated safely. Separately, the City of Palo Alto has maintained a Foothills Fire Mitigation Plan since 2009; such plan was most recently updated in 2016. Pursuant to the requirements of California Senate Bill 901 ("SB 901"), the Palo Alto electric utility is in the process of preparing its own wildfire mitigation plan to be completed prior to January 1, 2020 to include all of the information and elements proscribed in SB 901. See "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – *Legislation Relating to Wildfires; Related Risks*" in the front part of this Remarketing Memorandum.

Rates and Charges

The Palo Alto City Council is authorized by the Palo Alto Municipal Code to set fees and charges, pay for and supply all electric energy and power to be furnished to customers according to such

schedules, resolutions, rules and regulations as are adopted by the City Council. These rates are not subject to review by any State or federal agency. In addition, the City Charter provides for the maintenance of a separate fund for each utility into which is deposited receipts from the operations of such utilities and from which are payable the utility's costs and expenses, including operating and maintenance, debt service, capital expenditures, funding of reserves, and general fund transfers.

Palo Alto's fiscal year 2017-18 average rates per kWh for all service was 13.9 cents. Palo Alto's fiscal year 2017-18 average rates for commercial and industrial service was 13.7 cents per kWh. Palo Alto's fiscal year 2017-18 average rate per kWh for residential service was 14.8 cents.

The following table presents a history of Palo Alto's electric utility rate increases since 2014.

**CITY OF PALO ALTO
DEPARTMENT OF UTILITIES
RATE CHANGES**

<u>Date</u>	<u>Percent Change</u>
July 1, 2018	6.00%
July 1, 2017	14.0
July 1, 2016	11.0
July 1, 2015	0.0
July 1, 2014	0.0

Source: City of Palo Alto.

Palo Alto spends approximately 2.85% of gross electric revenues on the public benefit programs it originally developed in response to California Assembly Bill 1890, which was adopted in 1996 ("AB 1890"). In addition to funding available through the public benefits program, Palo Alto funds additional efficiency and renewable energy programs through the electric utility's supply resource acquisition budget.

Low-Income Programs

The following is a description of Palo Alto's low income assistance programs:

- ***Residential Energy Assistance Program (REAP)***. This program provides qualifying low-income residents with free energy efficiency measures and access to the Rate Assistance Program (RAP) rate discount. For qualifying customers, a Home Assessment, an application to the RAP, and an on-site customer evaluation for weatherization and energy efficiency measure installation, including insulation and lighting, is provided. Customers may have refrigerators and/or furnaces replaced if the need is found.
- ***Rate Assistance Program (RAP)***. This program provides a 25% discount for electric and gas charges for qualified customers. Applicants can qualify based on medical or financial need.
- ***Project PLEDGE***. This program provides a one-time contribution of up to \$750 applied to the utilities bill of qualifying residential customers. Eligibility criteria includes recent emergency events for employment and health. Administered by the Department of Utilities, this program is funded by voluntary customer contributions.

Largest Customers

The ten largest customers of Palo Alto's electric utility system, based upon energy usage for the fiscal year ended June 30, 2018 accounted for approximately 35.2% of total kWh sales and approximately 31.0% of total electric revenues. The largest account consumed 8.1% of Palo Alto's total kWh sales and contributed 6.9% of total revenues and the smallest of the ten largest accounts accounted for 1.9% of total kWh sales and 1.6% of revenues.

Customers, Energy Sales, Revenues and Demand

The average number of customers, kWh sales, revenues derived from sales by classification of service and peak demand during the five fiscal years 2013-14 through 2017-18, are listed below.

**CITY OF PALO ALTO
DEPARTMENT OF UTILITIES
CUSTOMERS, SALES, REVENUES⁽¹⁾ AND DEMAND⁽²⁾
Fiscal Year Ended June 30,**

	<u>2014</u>	<u>2015⁽³⁾</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Number of Customers:					
Residential	26,439	25,226	25,372	25,642	25,502
Commercial	2,556	3,682	3,715	3,753	3,788
Industrial	120	106	91	85	79
Other	224	122	126	136	144
Total	<u>29,339</u>	<u>29,136</u>	<u>29,304</u>	<u>29,616</u>	<u>29,513</u>
Kilowatt-Hour Sales (in thousands):					
Residential	182,228	145,447	150,112	148,986	150,064
Commercial	470,229	558,601	589,091	580,832	578,218
Industrial	213,768	202,839	168,141	157,502	141,387
Other	84,559	29,936	29,812	30,368	29,780
Total	<u>950,784</u>	<u>936,823</u>	<u>937,157</u>	<u>917,687</u>	<u>899,449</u>
Revenues from Sale of Energy:					
Residential	\$ 18,744	\$ 17,404	\$ 18,191	\$ 20,269	\$ 22,764
Commercial	65,244	66,457	68,593	73,471	82,299
Industrial	23,175	21,800	17,762	17,164	17,901
Other	3,225	3,234	3,127	3,780	4,264
Total	<u>\$110,388</u>	<u>\$108,895</u>	<u>\$108,033</u>	<u>\$114,684</u>	<u>\$127,228</u>
Peak Demand (MW)	168	172	178	171	182

⁽¹⁾ Revenues are exclusive of wholesale sales.

⁽²⁾ Columns may not add to totals due to rounding.

⁽³⁾ In 2015, the "Other" category was redefined as City of Palo Alto facilities only. Multi-family facilities were reclassified to "Commercial."

Source: City of Palo Alto.

Service Area

Population. The service area of Palo Alto's electric system is coterminous with Palo Alto's city boundaries. Shown below is certain population data for Palo Alto, the County of Santa Clara and the State of California.

**CITY OF PALO ALTO, COUNTY OF SANTA CLARA,
STATE OF CALIFORNIA POPULATION
(1970-2010 as of April 1; 2011-2019 as of January 1)**

Year	City of Palo Alto	County of Santa Clara	State of California
1970	56,040	1,065,313	19,971,069
1980	55,225	1,295,071	23,667,764
1990	55,900	1,497,577	29,760,021
2000	58,598	1,682,585	33,871,653
2010	64,403	1,781,642	37,253,956
2011	65,315	1,805,797	37,594,781
2012	66,292	1,832,983	37,971,427
2013	67,461	1,860,687	38,321,459
2014	67,594	1,882,230	38,622,301
2015	67,910	1,906,511	38,952,462
2016	68,832	1,925,306	39,214,803
2017	69,397	1,936,052	39,504,609
2018	69,395	1,947,798	39,740,508
2019	69,397	1,954,286	39,927,315

Sources: 1970-2010, as of April 1, based on historical U.S. Census population data compiled by the California State Department of Finance. 2011-2019, as of January 1, State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, with 2010 Census Benchmark. Sacramento, California, May 2019.

Employment. The main businesses in Palo Alto are manufacturing and industrial, but Palo Alto is also home to significant health care and education providers. There are numerous manufacturing plants producing electronic components, communications equipment, computer systems and similar products, and general items such as pharmaceutical and aerospace systems.

The ten largest employers in Palo Alto as of June 30, 2018 are shown in the following table.

**CITY OF PALO ALTO
LARGEST EMPLOYERS**

Employer	Business	Number of Employees
Stanford Health Care	Health Care Delivery	5,500
Lucille Packard Children's Hospital	Health Care Delivery	5,400
Stanford University ⁽¹⁾	Education	4,300
Veteran's Affairs Palo Alto Health Care System	Health Care Delivery	3,900
VMware Inc.	Software	3,500
SAP	Software	3,500
Space Systems/Loral	Satellite System Design & Manufacturing	2,800
Hewlett Packard Company	Computer Hardware and Software	2,500
Palo Alto Medical Foundation	Health Care Delivery	2,200
Varian Medical Systems	Medical Devices and Software	1,400

⁽¹⁾ Stanford University number of employees was provided by the Stanford Office of Planning and includes only employees located in Palo Alto.

Source: City of Palo Alto.

The San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area, as defined by the State Employment Development Department, includes all cities within San Benito and Santa Clara Counties. According to the California Employment Development Department, the County of Santa Clara's unemployment rate was 3.2% for the year 2017.

The following table sets forth certain information regarding employment in the City of Palo Alto for the fiscal year 2013-14 through 2017-18.

**CITY OF PALO ALTO
UNEMPLOYMENT RATES 2013 TO 2018**

Fiscal Year	Unemployment Rate
2013-14	2.8%
2014-15	2.7
2015-16	2.9
2016-17	2.4
2017-18	2.5

Source: State Department of Employment Development as reflected in City of Palo Alto Comprehensive Annual Financial Report for the fiscal year ended June 30, 2018.

Assessed Valuation. The five-year history of assessed valuations in Palo Alto is as follows.

**CITY OF PALO ALTO
TOTAL ASSESSED VALUATIONS
(Fiscal Years 2013-14 through 2017-18)**

2013-14	2014-15	2015-16	2016-17	2017-18
\$25,536,059	\$27,198,127	\$29,415,754	\$31,954,381	\$34,434,739

Source: County of Santa Clara's Assessor's Office.

Transportation. Palo Alto is served by freeways, interstate and state highways, bus service and trucking lines. Passenger rail transportation is provided by the Amtrak on a north/south commuter track. Air transportation is available at San Francisco International Airport, located approximately 25 miles to the north, and the San Jose International Airport which is approximately 15 miles from downtown Palo Alto.

Educational Facilities. Public education is provided in Palo Alto from kindergarten through high school. Palo Alto is also the location of Stanford University.

Forecast of Capital Expenditures

Palo Alto's five-year capital plan for electric distribution facilities contemplates capital expenditures in the following years and amounts:

**CITY OF PALO ALTO
DEPARTMENT OF UTILITIES
ESTIMATED CAPITAL EXPENDITURES
(Dollar Amounts in Thousands)**

Fiscal Year Ended June 30,

2019	2020	2021	2022	2023
\$21,400	\$12,480	\$14,094	\$17,294	\$13,709

Source: City of Palo Alto.

The capital expenditures are for infrastructure replacement and new customer connections; Palo Alto anticipates funding the majority of such costs from current year revenues. Since the 1960’s Palo Alto has followed a policy of funding its capital improvements primarily from revenues rather than debt financing.

Palo Alto does not currently plan to make further investment in new large-scale generation. Most of Palo Alto’s anticipated energy deficits are expected to be met with renewable power purchase agreements, long-term and short-term market purchases, and customer site distributed generation. Palo Alto is in the initial phases of studying a transmission upgrade project.

Indebtedness; Joint Powers Agency Obligations

In October 2007, Palo Alto issued \$1.5 million of 2007 Electric Utility Clean Renewable Energy Tax Credit Bonds (“CREBs”) to finance Palo Alto’s photovoltaic solar panel project. The bonds do not bear interest and are scheduled to be fully paid by December 2021. In lieu of receiving the periodic interest payments, bondholders are allowed annual federal income tax credits in an amount equal to a credit rate for such CREBs multiplied by the outstanding principal amount of the CREBs owned by the bondholders. As of June 3, 2019, the remaining outstanding principal balance of the CREBs was \$[300,000]. *{Please Confirm}*

Palo Alto issued its Utility Revenue Bonds, 1995 Series A (the “1995 Utility Bonds”) in February 1995 to finance certain extensions and improvements to Palo Alto’s Storm Drainage and Surface Water System. The 1995 Utility Bonds are special obligations of Palo Alto secured by a lien on net revenues of Palo Alto’s entire “Enterprise,” which consists of the City of Palo Alto water system, gas system, storm and surface water drainage system, sanitary sewer system, and electric system, except refuse service fund, fiber optics fund, and airport fund. The annual principal and interest debt service payments are solely paid by Palo Alto’s storm and surface water drainage system. As of June 3, 2019, the outstanding principal amount of the 1995 Utility Bonds was \$[645,000]. *{Please Confirm}*

As previously discussed, Palo Alto participates in two joint powers agencies, including NCPA and TANC. Obligations of Palo Alto under its agreements with respect to NCPA and TANC constitute operating expenses of the Palo Alto electric system payable prior to any of the payments required to be made on Palo Alto’s utilities’ revenue bonds or other obligations. Agreements with the joint powers agencies in which Palo Alto participates are on a “take-or-pay” basis, which requires payments to be made whether or not projects are completed or operable, and whether output from such projects is suspended, interrupted or terminated. These agreements contain “step-up” provisions obligating Palo Alto to pay a share of the obligations of a defaulting participant. Palo Alto’s participation and share of debt service obligation (without giving effect to any “step-up” provisions) for each of the joint powers agency projects in which it participates are shown in the following table.

**CITY OF PALO ALTO
DEPARTMENT OF UTILITIES
OUTSTANDING DEBT OF JOINT POWERS AGENCIES
(Dollar Amounts in Millions)
(As of June 3, 2019)**

	Outstanding Debt⁽¹⁾	Palo Alto Participation⁽²⁾	Palo Alto Share of Outstanding Debt⁽¹⁾
NCPA			
Geothermal Project	\$ 24.5	0.00% ⁽³⁾	\$ 1.5 ⁽³⁾
Hydroelectric Project	278.4	22.92 ⁽⁴⁾	65.4 ⁽⁴⁾
TANC			
COTP	191.8	0.00 ⁽⁵⁾	7.7 ⁽⁵⁾
TOTAL	\$509.2		\$74.6

(1) Principal only. Does not include obligation for payment of interest on such debt.

(2) Participation based on actual debt service obligation. Participation obligation is subject to increase upon default of another project participant. Such increase shall not exceed, without written consent of a non-defaulting participant, an accumulated maximum of 25% of such non-defaulting participant's original participation.

(3) Participation share of 6.16% was permanently assigned to TID in October 1984. Palo Alto remains contractually liable for its share. See “– Power Supply Resources – Joint Powers Agency Resources – *NCPA*” above.

(4) Palo Alto's actual payments represent approximately 23.5% of outstanding debt service as a result of credit to non-participating members with respect to portion of debt obligation.

(5) Participation share of 4.00% was assigned to SMUD, TID and MID in August 2008. Palo Alto remains contractually obligated for its share. See “– Power Supply Resources – Joint Powers Agency Resources – *TANC California-Oregon Transmission Project*” above.

Source: City of Palo Alto.

A portion of the joint powers agency debt obligations are variable rate debt, liquidity support for which is provided through liquidity arrangements with banks. Unreimbursed draws under liquidity arrangements supporting joint powers agency variable rate debt obligations bear interest at a maximum rate substantially in excess of the current interest rates on such obligations. Moreover, in certain circumstances, the failure to reimburse draws on the liquidity agreements may result in the acceleration of scheduled payment of the principal of such variable rate joint powers agency obligations. In connection with certain of such joint power agency obligations, the respective joint powers agency has entered into interest rate swap agreements for the purposes of substantially fixing the related interest cost. There is no guarantee that the floating rate payable to the respective joint powers agency pursuant to each of the related interest rate swap agreements will match the variable interest rate on the associated variable rate joint powers agency debt obligations to which the respective interest rate swap agreement relates. Under certain circumstances, the swap providers may be obligated to make payments to the applicable joint powers agency under their respective interest rate swap agreement that is less than the interest due on the associated variable rate joint powers agency debt obligations to which such interest rate swap agreement relates. In such event, such insufficiency will be payable as a debt service obligation from the obligated joint powers agency members (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Palo Alto). In addition, under certain circumstances, each of the swap agreements is subject to early termination, in which event the joint powers agency could be obligated to make a substantial payment to the applicable swap provider (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Palo Alto).

Employees

Labor Relations. As of January 1, 2019, 107 full-time equivalent (“FTE”) staff were assigned to the electric system of the Palo Alto Department of Utilities. All full-time employees, excluding the Utility Director, are represented by the Utilities Management and Professional Association of Palo Alto (“UMPAPA”) and Service Employees’ International Union (“SEIU”) Local 521. Matters pertaining to wages, benefits and working conditions are governed by a memorandum of understanding between the City of Palo Alto and SEIU. In December 2018, the City Council approved the first memorandum of understanding with UMPAPA that expires on June 30, 2019. The memorandum of understanding with SEIU expired on December 31, 2018. Palo Alto is in the process of negotiating a new contract with SEIU. Palo Alto’s wage and fringe benefits are generally comparable to those offered by other local public agencies. *{any update?}*

Pension Plans. Retirement benefits to City of Palo Alto employees, including those assigned to electric system, are provided through the Palo Alto’s participation in the California Public Employees Retirement System (“CalPERS”), an agent multiple-employer plan administered by CalPERS, which acts as a common investment and administrative agent for participating public employers within the State. Copies of the CalPERS annual financial report may be obtained from the CalPERS Executive Office, 400 Q Street, Sacramento, California 95814.

Palo Alto’s defined benefit pension plans, the Miscellaneous Plan and the Safety Plan of the Palo Alto, provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries for substantially all permanent Palo Alto employees. Benefit provisions under the plans are established by State statute and local government resolution. No employees assigned to the electric system participate in the Safety Plan.

Pension costs are funded by bi-weekly contributions to CalPERS by Palo Alto and contributions from employees. Active Miscellaneous Plan members hired prior to July 17, 2010 are required to contribute 8.00% of their annual covered salary, those member hired on or after July 17, 2010 are required to contribute 7% and those hired on or after January 1, 2013 are required to contribute 6.25% of their annual covered salary. The member contribution can be paid by the employee or by Palo Alto on the employee’s behalf in accordance with applicable labor agreements. The required member contributions are currently paid by the employees. Palo Alto’s employer contribution rate is determined annually by the actuary effective on the July 1 following notice of a change in rate. Funding contribution amounts are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Palo Alto is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. The actuarial methods and assumptions used are those adopted by the CalPERS Board of Administration. The contribution requirements of the plan members are established by State statute and the employer contribution rates are established, and may be amended, by CalPERS.

In April 2017, Palo Alto established an Internal Revenue Code Section 115 irrevocable trust with the Public Agency Retirement Services (“PARS”). The Palo Alto City Council approved an initial deposit of \$2.1 million in general fund proceeds into the general fund subaccount of Palo Alto’s PARS Trust Account. The PARS Trust Account allows more control and flexibility in investment allocations compared to Palo Alto’s portfolio which is restricted by State regulations to fixed income instructions. As of June 30, 2018, Palo Alto reported the account balance of \$5.5 million as restricted cash in general benefits, an internal service fund.

The table below sets forth the electric system’s allocated share of Palo Alto’s required contributions to the Miscellaneous Plan for the past four fiscal years and the amount budgeted for its

allocated share of the Palo Alto’s estimated required contributions to such plans for the current fiscal year and fiscal year 2019-20.

City of Palo Alto Miscellaneous Plan
(dollars in thousands)

Fiscal Year Ended June 30	Electric System Allocated Share	Total City Required Contribution Amount	Contributions as a % of Covered Payroll
2015	\$2,355	\$18,610 ⁽¹⁾	25.65%
2016	2,980	18,840	25.56
2017	2,961	20,638	26.59
2018	4,496	23,225	28.24
2019 ⁽²⁾	n/a	26,805	32.56
2020 ⁽²⁾	n/a	30,443	35.63

⁽¹⁾ Palo Alto’s actual contribution in fiscal year 2014-15 was \$18,611,000.

⁽²⁾ Based on CalPERS Annual Valuation Report as of June 30, 2017

Source: City of Palo Alto.

Palo Alto’s required contributions to CalPERS fluctuate each year and include a normal cost component and a component equal to an amortized amount of the unfunded liability. Many assumptions are used to estimate the ultimate liability of pensions and the contributions that will be required to meet those obligations. The CalPERS Board of Administration has adjusted and may in the future further adjust certain assumptions used in the CalPERS actuarial valuations, which adjustments may increase Palo Alto’s required contributions to CalPERS in future years. Accordingly, Palo Alto cannot provide any assurances that Palo Alto’s required contributions to CalPERS in future years will not significantly increase (or otherwise vary) from any past or current projected levels of contributions. The assumptions used to determine the actuarial accrued liabilities may be found in Palo Alto’s most recent audited financial statements which are available on Palo Alto’s website at <http://www.cityofpaloalto.org>.

On December 21, 2016, the CalPERS Board of Administration voted to lower the pension plan’s assumed rate of return for purposes of its actuarial valuations from 7.5% to 7.0% by 2020 (which reduction will be phased in over the period from fiscal year 2017-18 to 2019-20). CalPERS has estimated that with a reduction in the rate of return to 7.0%, most employers could expect a 1% to 3% increase in the percentage of payroll contribution for the normal cost for miscellaneous plans. In addition, CalPERS has estimated that employers could expect gradual increases in their unfunded accrued liability payment, reaching an approximate increase in such payment (relative to the unfunded accrued liability payments projected in the June 30, 2015 valuation report) of 30% to 40% by fiscal year 2024-25 for miscellaneous plans. As a result, required contributions of employers, including Palo Alto, toward unfunded accrued liabilities, and as a percentage of payroll for normal costs, are expected to increase.

Effective for the fiscal year ended June 30, 2015, Palo Alto adopted Governmental Accounting Standards Board (“GASB”) Statement No. 68 (“GASB No. 68”), affecting the reporting of pension liabilities for accounting purposes. Under GASB No. 68, Palo Alto is required to report the Net Pension Liability (*i.e.*, the difference between the Total Pension Liability and the Pension Plan’s Net Position or market value of assets) in its financial statements.

The table below summarizes certain information relating to the Net Pension Liability of the Miscellaneous Plan as of June 30, 2014 through June 30, 2017, as reported in Palo Alto’s audited financial statements for the fiscal year ended June 30, 2018. The electric system’s allocable share of Palo Alto’s net pension liability was not separately determined.

City of Palo Alto Miscellaneous Plan
(dollars in thousands)

Measurement Date⁽¹⁾ (June 30)	Net Pension Liability	Net Position as a % of Total Pension Liability	Net Pension Liability as a % of Covered Payroll
2014	\$187,108	71.80%	281.90%
2015	206,192	69.85	295.25
2016	244,237	65.79	331.29
2017	267,805	65.70	345.08

⁽¹⁾ Measured using prior fiscal year annual actuarial valuation rolled forward to measurement date using standard update procedures.

Source: City of Palo Alto.

As of the June 30, 2017 measurement date, the total pension liability for the Miscellaneous Plan for the City of Palo Alto was \$780,729,000 and the plan fiduciary net position was \$512,924,000, resulting in a city-wide Miscellaneous Plan net pension liability of \$267,805,000. In the June 30, 2016 actuarial valuation utilized for measuring the pension liability as of the June 30, 2017 measurement date, the Entry Age Normal Actuarial Cost Method was used. The actuarial valuation assumptions used for determining pension liabilities included (a) a 7.15% discount rate; (b) projected salary increases that vary based on age and type of service; and (c) an inflation rate of 2.75% per year.

Retiree Health Benefits. Palo Alto participates in the California Public Employees Medical and Health Care Act to provide certain health care benefits for retired employees, including employees of the electric system (the “OPEB Plan”). In fiscal year 2007-08, Palo Alto elected to participate in an irrevocable trust (the “Trust Fund”) to provide a funding mechanism for its OPEB liability. The Trust Fund, California Employers’ Retirees Benefit Trust, is administered by CalPERS and managed by a separately appointed board, which is not under control of the City Council. Palo Alto’s policy is to prefund these OPEB benefits by accumulating assets in the Trust Fund pursuant to City Council Resolution. The OPEB Plan annual contributions to the Trust Fund are based on actuarial valuations. Under the OPEB Plan, employees who retire directly from the City of Palo Alto are eligible for benefits if they retire on or after age 50 with 5 years of service and are receiving a monthly pension from CalPERS.

For Fiscal Years prior to fiscal year 2017-18, Palo Alto’s reported annual OPEB cost (expense) was calculated based upon the annual required contribution (“ARC”), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents the level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over 30 years.

The table below sets forth certain information regarding the Palo Alto’s annual OPEB cost, the percentage of annual OPEB cost contributed and Palo Alto’s Net OPEB obligation for the three fiscal years 2014-15 through 2016-17.

City of Palo Alto OPEB Plan
(dollars in thousands)

Fiscal Year Ended June 30	Annual OPEB Cost	% of Annual OPEB Cost Contributed	Net OPEB Obligation (Asset)
2015	\$14,773	102%	\$(22,871)
2016	15,292	92	(21,662)
2017	16,890	87	(19,419)

Source: City of Palo Alto.

Effective for fiscal year 2017-18, Palo Alto follows the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (“GASB No. 75”) affecting the reporting of OPEB liabilities for accounting purposes. GASB No. 75 replaces the requirements of GASB Statement No. 45. GASB No. 75 establishes standards for employers with other postemployment liabilities for recognizing and measuring net OPEB liabilities, along with deferred inflows and outflows of resources, and expenses/expenditures related to the other postemployment liability. GASB No. 75 does not affect funding requirements.

The table below sets forth certain information regarding the electric system’s allocated share of Palo Alto’s annual contributions to the OPEB Plan trust for the fiscal years ended June 30, 2017 and 2018, and the relation of Palo Alto’s contributions to the actuarially determined contribution amount for such fiscal year. The amount budgeted for the electric system’s share of OPEB Plan contributions for fiscal year 2018-19 is \$1,555,185.

City of Palo Alto OPEB Plan
(dollars in thousands)

Fiscal Year Ended June 30	Contribution Funded by Electric System	Total City Contribution	Actuarially Determined Contribution Amount	Contribution Deficiency (Excess) to Actuarially Determined Contribution
2017	n/a	\$14,739	\$16,365	\$1,626
2018	\$560	21,349	16,938	(4,411)

Source: City of Palo Alto.

Pursuant to GASB No. 75, for the fiscal year ended June 30, 2018, Palo Alto reported a net OPEB liability of approximately \$153,509,000 (reflecting a total OPEB liability of \$244,759,000 and a plan fiduciary net position of \$91,250,000 for the OPEB Plan). The net OPEB liability as a percentage of covered-employee payroll was 129.24%. The OPEB Plan Net Position as a percentage of Palo Alto’s total OPEB liability was 37.28%. The net OPEB liability was measured as of June 30, 2017, using an annual actuarial valuation as of June 30, 2017, based on actuarial methods and assumptions. The actuarial assumptions used include: (a) a 6.75% discount rate; (b) a 2.75% inflation rate; (c) payroll growth of 3.00%; (d) a 6.75% investment rate of return; and (e) post-retirement benefit cost increases of 6.50% for 2019, decreasing to 4.00% for 2076 and later for medical plan premiums, and 7.50% for 2019, decreasing to 4.00% for 2076 and later for pre-medicare premiums.

Additional information regarding the City of Palo Alto’s retirement plans and other post-employment benefits can be found in Palo Alto’s comprehensive annual financial reports, which may be obtained at <http://www.cityofpaloalto.org>.

Insurance

Palo Alto is self-insured up to \$1 million and is a member of the Authority for California Cities Excess Liability (“ACCEL”) risk pool. ACCEL is a joint powers authority that includes 13 members from medium-sized cities self-funding for catastrophic losses. Palo Alto shares risk within this pool up to \$4 million and through the pool, purchases commercial excess insurance limits up to \$200 million. In addition, Palo Alto maintains property insurance including loss or damage to Palo Alto electric system property.

Litigation

There is no action, suit or proceeding known to be pending or threatened, restraining or enjoining Palo Alto in the execution or delivery of, or in any way contesting or affecting the validity of any proceedings of Palo Alto taken with respect to, the Third Phase Agreement.

There is no litigation pending, or to the knowledge of Palo Alto, threatened, questioning the existence of Palo Alto, or the title of the officers of Palo Alto to their respective offices. As of the date of this Remarketing Memorandum, there is no litigation pending, or to the knowledge of Palo Alto, threatened, questioning or affecting in any material respect the financial condition of Palo Alto’s electric utility system.

As described below, litigation has been filed challenging the Palo Alto utilities’ transfers to the General Fund:

Green v. City of Palo Alto. Through annual equity transfers, Palo Alto transfers a portion of the earnings of its gas and electric utilities to its General Fund each year, pursuant to a voter-approved charter provision authorizing it to do so. In October 2016, plaintiff Miriam Green (“Green”) filed a class action lawsuit against Palo Alto challenging Palo Alto’s equity transfers and electric rates, under Proposition 26. In May 2017, the court approved the parties’ stipulation (a formal agreement between counsel) certifying the class of plaintiffs in exchange for the plaintiffs’ agreement to (i) stay the case pending a decision in *Citizens for Fair REU Rates v. City of Redding*, California Supreme Court Case No. S224779, and (ii) dismiss plaintiff’s three claims challenging the cost-justification of Palo Alto’s electric rates. The City of Redding case concerned many of the same issues as those raised in plaintiff’s suits against Palo Alto. In October 2018, Green filed a second class action lawsuit against Palo Alto, making the same allegations with respect to the electric and gas rates that the City Council adopted in June 2018. In the fiscal year ended June 30, 2018, these transfers amounted to \$19.6 million (\$12.9 million electric and \$6.7 million gas) and in the fiscal year ended June 30, 2017, the transfers amounted to \$18.7 million (\$12 million electric and \$6.7 million gas). In this respect, Palo Alto is similar to all municipal power utilities (and the four municipal gas utilities in California), which make annual general fund transfers on various theories.

The California Supreme Court granted review of the *City of Redding* matter, and on August 27, 2018, the California Supreme Court rendered its decision, reversing the judgement of the Court of Appeal. In *City of Redding*, the California Supreme Court determined that the City of Redding’s transfer from the city-owned electric utility to the city’s general fund, which was calculated as a “payment in lieu of taxes,” itself is not the type of exaction that is subject to Article XIII C of the California Constitution. The court reasoned that it is only the city’s electric utility rates, not the payments made by the city-owned utility, that are imposed on customers for electric service. The California Supreme Court concluded that because the total rate revenue of the electric utility was insufficient to cover the electric utility’s uncontested operating expenses (other than the payments in lieu of taxes) in the years at issue, the challenged rate did not exceed the reasonable costs of providing electric service, and therefore did not constitute a tax. Palo Alto is evaluating its options in *Green* in light of *City of Redding*, and preparing for a case management conference on April 5, 2019. **{Please Provide Update}**No matter the outcome, the Green litigation is not expected to have a material financial impact on the Palo Alto’s Electric Fund.

Lawsuits and other claims filed against Palo Alto as it relates to its Department of Utilities' electric system and operations arise in the ordinary course and scope of Palo Alto's municipal utility business and are largely covered by Palo Alto's self-insurance program. In the opinion of Palo Alto's management and attorneys, these lawsuits and other claims will not have a material adverse effect upon Palo Alto's electric system and operations.

Palo Alto's Operations Since Industry Restructuring

Electric System Policies. In March 1997, the City Council of Palo Alto approved three electric utility policies relating to customer choice, stranded cost recovery and marketing beyond Palo Alto borders. Palo Alto undertook a number of actions in order to implement those policies. Direct access (discussed below) was offered to large commercial and industrial customers; however none of them exercised the option. Given the lack of interest in the community for direct access in combination with the instability of energy markets in 2001 and CPUC actions relating to direct access, direct access was suspended by the City Council effective August 1, 2001. There are no plans to re-implement direct access at this time.

AB 1890, adopted in 1996, provided for the deregulation of California's electric industry effective January 1, 1998. A key element of deregulation was the provision for "direct access", which would allow electric customers to choose their electric commodity supplier. Palo Alto, along with other California utilities, was faced with the prospect of losing customers and load to direct access and having made significant investments in generation assets purchased or built to serve these customers. In response to such risk, PG&E and certain other investor- and municipally-owned utilities established stranded cost surcharges to collect funds from ratepayers to cover the amount that these uneconomic assets were projected to cost above their market value in the future (*i.e.*, "stranded cost").

Electric Special Project Reserve (formerly the Calaveras Reserve). In 1983, the City Council established the Calaveras Reserve in the Electric Fund to help defray a portion of the annual debt service costs associated with the NCPA Calaveras Hydroelectric Project, which was put in service at that time. As originally established, the Calaveras Reserve policy did not provide for a target balance and depletion of the reserve was anticipated by 2002.

In 1996, the City Council changed the purpose of the Calaveras Reserve and authorized collections from electric ratepayers to cover stranded cost. In addition, the City Council approved a new policy linking the reserve balance to an amount sufficient to cover other potential stranded costs. The assets identified as stranded at that time included the Seattle City Light Exchange contract (terminated in May 2018), the Calaveras Hydroelectric Project and the COTP.

In 1997, the City Council revised the reserve target level to cover above-market, or "stranded," costs to \$93 million by December 31, 2001 to be collected from a stranded cost surcharge imposed on electric rates. When the Calaveras Reserve balance reached \$71 million in 1999, stranded costs were deemed fully collected. At that time, Council authorized the cessation of the collection of the stranded cost surcharge and established the Calaveras Reserve Target and Guidelines with a schedule to drawdown the funds and manage electric rates through transfers from the Calaveras Reserve to the Electric Supply Rate Stabilization Reserve (E-SRSR) through the end of fiscal year 2032-33, when the Calaveras Reserve would be exhausted.

In 2001, the California electric industry faced an energy crisis triggering wholesale power price spikes and rolling blackouts throughout the State. The crisis was blamed on poor deregulation market design and market manipulation by energy suppliers. As a result, direct access was suspended in California for the investor-owned utilities (although it was subsequently phased in for non-residential end-use customers of the investor-owned utilities pursuant to Senate Bill 695, adopted in 2009) and subsequently, Palo Alto suspended its direct access program. Further, as a result of changing market

conditions and the assignment of certain electric assets, the estimate of the City’s stranded cost is lower now than when stranded cost collections stopped in 1999. Since then, electric market prices have increased significantly, reducing the stranded cost associated with the Calaveras Hydroelectric Project.

On June 15, 2009, the City Council adopted new guidelines to manage the Calaveras Reserve which required an annual calculation of short-term stranded costs during the annual budget process for the upcoming budget year(s) and set the minimum transfer from the Calaveras Reserve to the Electric Supply Operating Budget equal to this amount. The revised guidelines also called for an annual calculation of long-term stranded cost and identification of any excess funds in the Calaveras Reserve available to fund projects to the benefit of electric ratepayers.

On November 1, 2011, the City Council renamed the Calaveras Reserve as the Electric Special Project Reserve (“ESP”) and approved a new policy direction and guidelines for use of funds. On May 18, 2015, the City Council updated the guidelines to extend the deadlines to commit funds and close the ESP Reserve, as follows:

- The purpose of the ESP Reserve is to fund projects that benefit electric ratepayers;
- ESP Reserve funds are to be used for projects of significant impact;
- Projects proposed for funding must demonstrate a need and/or value to electric ratepayers. The projects must have verifiable value and not be speculative, or risky in nature;
- Projects proposed for funding must be substantial in size, requiring funding of at least \$1 million;
- Set a goal to commit funds by end of fiscal year 2016-17; and
- Any uncommitted funds remaining at the end of fiscal year 2021-22 will be transferred to the Electric Supply Operation Reserve and the ESP Reserve will be closed.

As of December 2018, the ESP Reserve funds have not been fully committed; however, staff is evaluating suitable large projects such as advanced metering infrastructure which could increase utility resiliency. The approximate balance of the ESP Reserve as of June 30 for the five fiscal years 2013-14 through 2017-18 is set forth below:

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18⁽¹⁾</u>
Balance	\$51,838,000	\$51,838,000	\$51,838,000	\$51,838,000	\$41,665,000

Source: City of Palo Alto Audited Financial Statements for fiscal years 2013-14 through 2017-18.

⁽¹⁾ In fiscal year 2017-18, the Palo Alto City Council approved a \$10 million loan from the ESP Reserve to keep the Electric Distribution Operations Reserve above the minimum reserve guidelines. The loan is expected to be repaid to the ESP Reserve within five years. See “–Operations Reserve” below.

Rate Stabilization Reserve. In June 1998, the City Council approved staff’s recommendation to unbundle the Electric and Gas Rate Stabilization Reserves (“RSR”). The RSR was originally created to cover a number of unforeseen contingencies, including the need to supplement rates which cover distribution expenses, and commodity supply costs. The City Council has approved a set of guidelines for the RSR based on a forecast of contingencies to be covered. In December 2003 and again in January 2007, the City Council updated the reserve guidelines taking into account, among other aspects, the increased cost volatility due to the electric portfolio cost exposure to hydroelectric production uncertainties that arose in 2005 with the then-new Western Base Resource Contract. In June 2014, the City Council approved updated Reserves Management Practices, and existing reserves were separated for more specific purposes. The RSR is now are used to manage the trajectory of future rate increases, with

the Operations Reserve being used to manage normal variations in the costs of providing electric service and as a reserve for contingencies. As of June 30, 2018, the balance of RSR was \$9.0 million.

Operations Reserve. In June 2014, the City Council approved updated Reserves Management Practices. New Electric Supply Fund and Electric Distribution Fund Operations Reserves were created, and are used to manage normal variations in the costs of providing electric service and as a reserve for contingencies. The City Council approved a set of guidelines for the minimum and maximum level of reserves to be held, as well as policies should reserves fall outside of those ranges. As of June 30, 2018, the balance of the Supply Operations and Distribution Operations Reserves were \$9.54 and \$10.4 million, respectively. The Supply Operations Reserve amount is below the City Council guidelines for the minimum level of reserves to be held, but the City Council approved transfers in fiscal year 2018 to raise the balance of such reserves above the guidelines for the minimum level.

Hydro Stabilization Reserve. In accordance with the City's updated Reserves Management Practices approved in June 2014, supply cost savings and surplus energy sales revenue associated with higher than average generation from hydroelectric resources may be added to the Electric Supply Fund's Hydro Stabilization Reserve by action of the City Council and held to offset higher commodity supply costs during years of lower than average generation. Withdrawal of funds from the Hydro Stabilization Reserve requires action by the City Council. As of June 30, 2018, the balance of the Hydro Stabilization Reserve was \$11.4 million.

Public Benefits Reserve. In June 1998, the City Council of Palo Alto approved the Public Benefits Reserve to be created for the purpose of establishing a separate reserve from the Electric Fund. The revenue collected for the Public Benefit programs that are not spent are deposited into this reserve for future use. The balance of the Public Benefits Reserve at June 30, 2018 was \$681,000.

Unbundled Electric Rates. In June 1997, Palo Alto became the first electric utility in California to unbundle its electric rates on customers' bills. Palo Alto's unbundled electric rates were initially comprised of the following four components: (i) a power supply charge, (ii) a distribution charge, (iii) a transition cost recovery charge and (iv) a public benefits charge. On July 1, 1999, the transition cost recovery charge was discontinued. The distribution charge and public benefits charge are non-bypassable charges and therefore are paid to Palo Alto by the customer, regardless of energy supplier.

Significant Accounting Policies

Palo Alto's most recent Annual Financial Report for the fiscal year ended June 30, 2018 has been audited by Macias Gini & O'Connell LLP, Walnut Creek, California, in accordance with generally accepted auditing standards, and contains opinions that the financial statements present fairly, in all material respects, the respective financial position of the various funds maintained by Palo Alto. The reports include certain notes to the financial statements which are not described below. Such notes constitute an integral part of the audited financial statements. Copies of these reports are available on request from the Administrative Services Department, City of Palo Alto, 250 Hamilton Avenue, Palo Alto, California 94301 and are available on-line at <https://www.cityofpaloalto.org/gov/depts/asd/reporting.asp>. Governmental accounting systems are organized and operated on a fund basis. A fund is defined as an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein. Funds are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions or limitations.

The Palo Alto electric system is accounted for as an enterprise fund. Enterprise funds are used to account for operations (i) that are financed and operated in a manner similar to private business enterprises (where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily

through user charges) or (ii) where the governing body has decided that periodic determination of revenues earned, expenses incurred and/or net income is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

Condensed Operating Results and Selected Balance Sheet Information

The following table sets forth summaries of income and selected balance sheet information of Palo Alto's electric and fiber optic funds for the five fiscal years 2013-14 through 2017-18. The information for the fiscal years ended June 30, 2014 through June 30, 2018 was prepared by Palo Alto on the basis of its audited financial statements for such years.

**CITY OF PALO ALTO
DEPARTMENT OF UTILITIES
ELECTRIC AND FIBER OPTICS FUNDS
CONDENSED OPERATING RESULTS AND SELECTED
BALANCE SHEET INFORMATION⁽¹⁾
(Dollar Amounts in Thousands)**

	Fiscal Year ended June 30,				
	2014	2015	2016	2017	2018
Summary of Income:					
Operating Revenues	\$121,916	\$120,842	\$120,743	\$137,543	\$ 158,671
Operating Expenses ⁽²⁾	<u>(103,817)</u>	<u>(113,534)</u>	<u>(111,314)</u>	<u>(119,568)</u>	<u>(139,587)</u>
Operating Income	18,099	7,308	9,429	17,975	19,084
Other Income ⁽³⁾	(5,802)	(6,676)	(5,763)	(9,224)	(8,437)
Loss on Disposal of					
Fixed Assets	(271)	(312)	(74)	(116)	(26)
Transfers in	1,089	51	259	2,679	3,465
Transfers out ⁽⁴⁾	<u>(11,460)</u>	<u>(11,580)</u>	<u>(12,110)</u>	<u>(12,543)</u>	<u>(13,448)</u>
Net Income	<u>\$1,655</u>	<u>\$(11,206)</u>	<u>\$(8,259)</u>	<u>\$(1,229)</u>	<u>\$ 638</u>
Selected Balance Sheet Information:					
Net Property Plant and Equipment	\$176,408	\$180,546	\$187,091	\$190,930	\$202,063
Unrestricted	<u>140,465</u>	<u>96,515</u>	<u>81,711</u>	<u>76,643</u>	<u>85,369</u>
Total Net Assets	<u>\$316,873</u>	<u>\$277,061</u>	<u>\$268,802</u>	<u>\$267,573</u>	<u>\$287,432</u>

⁽¹⁾ Includes electric and fiber optics funds to be consistent with past reporting. Fiber optics (the Operating Revenues of which totaled approximately \$4.5 million in fiscal year 2018) was originally reported as an integral part of electric operations. A schedule reflecting the breakdown of the financial results for each of Palo Alto's proprietary funds for the Fiscal Year ended June 30, 2018 can be found in the Annual Report, which has been incorporated herein by reference. See "- Introduction" above.

⁽²⁾ Includes purchased power costs and payments to NCPA and TANC. Also includes depreciation in the amount (in thousands) of \$7,504 in fiscal year 2014, \$7,383 in fiscal year 2015, \$7,607 in fiscal year 2016, \$7,733 in fiscal year 2017 and \$8,432 in fiscal year 2018.

⁽³⁾ The negative "Other Income" consists of debt service Palo Alto paid on NCPA bonds and investment earnings due to recording of market value gains.

⁽⁴⁾ Composed primarily of transfers to Palo Alto general fund for costs incurred for the benefit of the Palo Alto utility system, transfers to fund retiree medical benefits and transfers to the capital projects fund.

Source: City of Palo Alto.

CITY OF ROSEVILLE

Introduction

The City of Roseville (“Roseville”) is a charter city in the State of California. Roseville is located in Placer County, in California’s Sacramento Valley near the foothills of the Sierra Nevada mountain range, about 16 miles northeast of Sacramento and 110 miles east of San Francisco. Roseville, with a population estimated to be approximately 137,213 at January 1, 2018, is the largest city in Placer County, as well as the residential and industrial center of the County.

Roseville, through its electric system (the “Electric System”), has been providing electrical power to its residents, businesses, and Roseville’s street and traffic lighting systems since 1912. In 1956, Roseville entered into a contract with the Federal Bureau of Reclamation for 54 megawatts (“MW”; a megawatt equals 1 million watts) of electric capacity from the Central Valley hydroelectric project, which consists of a system of dams, reservoirs and power plants within central and northern California (the contract is currently administered through the Western Area Power Administration (“Western”). In the early 1970s, Roseville’s demand for electricity exceeded the Western resource allocation. To help meet this additional need, in 1968 Roseville became a charter member in NCPA. Roseville participates in several resources developed by NCPA, including its geothermal, steam-injected gas turbine, and hydroelectric projects. In October of 2007, Roseville completed construction of a 160 MW natural gas fired combined cycle power plant (the “Roseville Energy Park” or “REP”). REP was built as a reliable, economic alternative to bulk power purchases. REP has a base operating capacity of 120 MW with the ability to peak-fire up to 160 MW. On September 1, 2010, Roseville completed the purchase from NCPA, and assumed full title and ownership, of two of the five 24 MW simple cycle combustion turbines originally part of the NCPA Combustion Turbine Project No. 1 (for a total of 48 MW of capacity), which are connected to the Roseville electric distribution system (and now referred to as “Roseville Power Plant 2”) to meet reserve and capacity requirements.

Roseville’s Electric System is under the supervision of the Roseville City Council. A seven-member Roseville Public Utilities Commission serves as an advisory board to the City Council on matters relating to all utilities owned and operated by the City. The City Council appoints all seven members of the Roseville Public Utilities Commission. The Electric Utility Director oversees operations of the electric utility and reports to the City Manager.

Only the revenues of the Roseville Electric System will be available to pay amounts owed by Roseville under the Third Phase Agreement.

The Roseville electric department’s main office is located at 2090 Hilltop Circle, Roseville, California 95747, (916) 797-6937. For more information about Roseville and its Electric System, contact Michelle Bertolino, Electric Utility Director, at the above address and telephone number. A copy of the most recent comprehensive annual financial report of the City of Roseville (the “Annual Report”) is available on Roseville’s website at <https://www.roseville.ca.us/> and on the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access system at <http://emma.msrb.org/>. The Annual Report is incorporated herein by this reference. However, the information presented on such website or referenced therein other than the Annual Report is not part of this Remarketing Memorandum and is not incorporated by reference herein.

Service Area, Customer Base and Demand

Service Area. The Roseville Electric System serves an area of approximately 43 square miles, virtually coterminous with the City’s borders. As of June 30, 2018, the Electric System served an estimated 60,133 customers.

Customer Base. In Fiscal Years 2013-14 through 2017-18, the Electric System’s customer base increased by over 1.5% per year. Anticipated residential growth includes over 24,000 new residences associated with approved projects upon build-out of current and developing specific plans. Recent commercial growth includes a McKesson Medical-Surgical distribution center and health care industry expansions for Kaiser Permanente and Adventist Health.

Shown below is certain population data for the City of Roseville, the County of Placer and the State of California:

**CITY OF ROSEVILLE, COUNTY OF PLACER,
STATE OF CALIFORNIA POPULATION
(1970-2010 as of April 1; 2011-2019 as of January 1)**

	<u>City of Roseville</u>	<u>County of Placer</u>	<u>State of California</u>
1970	18,221	77,632	19,971,069
1980	24,347	117,247	23,667,764
1990	44,685	172,796	29,760,021
2000	79,921	248,399	33,871,653
2010	118,788	348,432	37,253,956
2011	121,351	354,359	37,594,781
2012	123,757	359,790	37,971,427
2013	126,068	363,618	38,321,459
2014	127,873	368,141	38,622,301
2015	129,120	371,326	38,952,462
2016	132,000	376,443	39,214,803
2017	134,110	383,719	39,504,609
2018	136,260	389,480	39,740,508
2019	139,643	396,691	39,927,315

Source: 1970-2010, as of April 1, based on historical U.S. Census population data compiled by the California State Department of Finance. 2011-2019, as of January 1, State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, with 2010 Census Benchmark. Sacramento, California, May 2019.

The largest employers in Roseville as of June 30, 2018 are set forth in the table on the following page:

[Remainder of page intentionally left blank.]

**CITY OF ROSEVILLE
LARGEST EMPLOYERS
(As of June 30, 2018)**

Employer	Business	Number of Employees
Kaiser Permanente	Health Care	3,148
Sutter Roseville Medical Center	Health Care	2,202
City of Roseville	Government	1,896
Roseville Joint Union High School District	Education	1,626
Roseville City School District	Education	1,133
PRIDE Industries	Employment Service	1,062
Adventist Health	Health Care	940
Wal-Mart	Retail	625
Union Pacific Railroad	Railroad	569
Consolidated Communications	Cable Television	475

Source: City of Roseville

Historical Customers Sales and Peak Demand. The average number of customers, electricity sales measured in megawatt hours (“MWh”) and in revenues, and peak demand during the past five Fiscal Years, is listed below.

**CITY OF ROSEVILLE
ELECTRIC SYSTEM
CUSTOMERS, SALES, REVENUES AND PEAK DEMAND⁽¹⁾**

	Fiscal Year Ended June 30,				
	2014	2015	2016	2017	2018
Number of Customers: ⁽²⁾					
Residential	49,013	49,851	50,784	51,638	52,789
Commercial	6,615	6,673	6,700	6,759	6,812
Total	55,628	56,524	57,484	58,397	59,601
MWh Deliveries (Average):					
Residential	434,594	428,824	439,495	439,598	454,795
Commercial	748,218	748,913	750,482	737,843	728,497
Total MWh sales	1,182,812	1,177,737	1,189,977	1,177,441	1,183,292
Revenues (\$ in 000s):					
Residential	\$ 66,728	\$ 67,660	\$ 68,853	\$ 68,543	\$ 70,803
Commercial	92,347	96,028	95,078	93,011	91,495
Total Revenues from Sale of Energy	\$159,075	\$163,688	\$163,930	\$161,554	\$162,298
Peak Demand (MW)	340	340	331	355	354

⁽¹⁾ Revenues listed are as billed. For realized revenues, see the table under “Historical Revenues, Expenses and Debt Service Coverage” below.

⁽²⁾ Customer counts reported as fiscal year average annual values.

Note: Totals may not add due to rounding.

Source: City of Roseville.

Ten Largest Customers

As of June 30, 2018, the ten largest customers of Roseville’s Electric System by usage accounted for an estimated 23% of total kWh sales and 17% of total Electric System revenues. The largest customer accounted for an estimated 9% of total kWh sales and 6% of total Electric System revenues. The smallest

of the ten largest customers accounted for an estimated 0.6% of total kWh sales and 0.5% of total Electric System revenues.

Sources of Power Supply

General

Roseville has a diverse portfolio of resources that includes large hydroelectric, geothermal, natural gas, system power contracts, and additional contracts for renewable energy. In addition, Roseville purchases its incremental needs through open market purchases. Roseville owns and operates the Roseville Energy Park and the two units constructed under NCPA Combustion Turbine Project No. 1 (subsequently renamed Roseville Power Plant 2) connected to the Roseville electric distribution system. Roseville has a long-term contract with Western for a share of the Central Valley Project net generation and entitlements to the output of several NCPA projects.

The table on the following page provides an estimated summary of Roseville's sources of power supply for Fiscal Year 2017-18.

**CITY OF ROSEVILLE
ELECTRIC SYSTEM
SOURCES OF POWER SUPPLY
Fiscal Year 2017-18**

Source	Type	Capacity Available (MW) ⁽¹⁾	Actual Energy (GWh) ⁽²⁾	% of Total
Generation:				
Roseville Energy Park ⁽³⁾	Natural Gas	80	24	2%
Roseville Power Plant 2	Natural Gas	24	1	
Purchased Power:				
Western ⁽⁴⁾	Hydro	69	141	12
NCPA				
Geothermal Project	Geothermal	8	62	5
Hydroelectric Project	Hydro	29	59	5
Steam Injected Gas Turbine Generator Project ⁽⁵⁾	Natural Gas	18	4	
Market Purchases:				
Renewable Purchases	Various	32	316	26
Non-Renewable Purchases	Various	105	619	51
TOTAL*		365*	1,225*	100%*
Peak Demand (MW)		354		
Capacity Reserve Percent ⁽⁶⁾		3%		

(1) Capacity in MW and available for system peak (August 28, 2017).

(2) One gigawatt hour (GWh) equals 1 million kilowatt hours (kWh).

(3) The 155 MW Roseville Energy Park was limited to an output capacity of 80 MW due to a forced outage of the steam turbine generator.

(4) Includes reserve capacity.

(5) Referred to as the NCPA Capital Facilities Project in the front part of this Remarketing Memorandum.

(6) Capacity includes resources and contracts for long-term and seasonable purchases. Capacity reserve planning target is 15% of the forecasted peak. Actual peak exceeded forecasted peak (339 MW) due to near-record system peak.

* Numbers may not total due to rounding.

Source: City of Roseville.

Roseville Energy Park

Roseville Energy Park (“REP”), is a 120 MW base load combined cycle, natural gas fueled power plant with duct firing capability up to 160 MW. The REP is located in the City of Roseville and is directly connected to Roseville’s distribution system. REP is comprised of two Siemens SGT 800 combustion turbine units and a Siemens STG 900 steam turbine. The plant has been in commercial operation since October 2007 and is owned and operated by Roseville. In March 2017, REP’s steam turbine generator was damaged, and REP ran through the summer 2017 in an 80 MW dual combustion turbine configuration. The steam turbine generator was replaced ahead of schedule in May 2018 and the facility is currently at 100% availability factor.

Roseville Power Plant 2

The Roseville Power Plant 2 (“RPP2”) consists of two 24 MW simple cycle combustion turbines (“CT1” and “CT2”), for a total of 48 MW of capacity. These units were previously part of the NCPA Combustion Turbine Project No. 1 in which Roseville was a participant. On September 1, 2010, Roseville took ownership of the two units which provide peaking capacity and reserves for Roseville. In July 2016, CT2 went into outage for generator repairs, derating RPP2 to 24 MW. The CT2 generator was disassembled for a major overhaul. It was reassembled, and a new protection system was installed and commissioned on November 1, 2018. A new protection system was also installed and commissioned for the CT1 generator on December 11, 2018.

Western Area Power Administration

Roseville has various long-term contracts with Western that provide energy, interconnection, and transmission services. Roseville has a 4.85333% share of the net output of the Central Valley Project (“CVP”), which provides varying amounts of capacity and energy depending upon hydrologic conditions. The output is reduced by Western’s project use, first preference customer allocations, environmental, and control area obligations. Roseville is directly connected to Western’s transmission system and acquires reserves under contract that include regulation and frequency response and operational reserves. The term of the power supply contract extends through December 31, 2024.

Joint Powers Agency Resources

NCPA. In addition to generating and purchasing power from other sources, Roseville is a participant in a number of NCPA projects. Roseville has a 12.00% entitlement share in the NCPA Hydroelectric Project, a 36.50% entitlement share in the Combustion Turbine Project Number Two (referred to as the NCPA Capital Facilities Project) and a 7.88% entitlement share in the NCPA Geothermal Project. For a description of such resources, see “THE HYDROELECTRIC PROJECT” and “OTHER NCPA PROJECTS” in the front part of this Remarketing Memorandum. For each of these generation projects in which Roseville participates, Roseville is obligated to pay on an unconditional take-or-pay basis, as an operating expense of its electric system, its entitlement share of the debt service on NCPA bonds issued for the project as well as its share of the operation and maintenance expenses of the project. See also “– Indebtedness; Joint Powers Agency Obligations” below.

In order to meet certain obligations required of NCPA to secure transmission and other support services for the NCPA Geothermal Project, NCPA and its transmission project participants (including Roseville) undertook the “Geysers Transmission Project,” which includes (a) an ownership interest in PG&E’s 230 kilovolt (“kV;” 1 kilovolt equals 1,000 volts) line from Castle Rock Junction in Sonoma County to the Lakeville Substation, (b) additional firm transmission rights in this line, and (c) a Central Dispatch Center (see “Dispatch and Scheduling” below). Roseville is entitled to a 14.18% share of the Geysers Transmission Project transfer capability, and is responsible for 14.18% of the costs of such project.

For a description of the Geysers Transmission Project, see “OTHER NCPA PROJECTS” in the front part of this Remarketing Memorandum. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – PG&E Bankruptcy” in the front part of this Remarketing Memorandum.

Renewable Purchases

With the passage of California Senate Bill X1-2, the California Renewable Energy Resources Act (“SBX1-2”), California Senate Bill 350, the Clean Energy and Pollution Reduction Act of 2015 (“SB350”), and California Senate Bill 100, the 100 Percent Clean Energy Act of 2018 (“SB 100”), Roseville must comply with the State’s renewable energy targets to achieve renewable energy procurement of 33% by 2020, 50% by 2025, and 60% by 2030. Roseville has an additional incentive to enter into long term contracts, as certain contracts at least ten years in duration have the ability to carry forward renewable energy credits to be used to meet future compliance periods. Starting in 2020, 65% of RPS procurement must be derived from long-term contracts of 10 or more years. Roseville satisfied the RPS target for Compliance Period 1 (from 2011 through 2013), with approximately 20% renewable energy procured, as well as Compliance Period 2 (from 2014 through 2016), with approximately 25% renewable energy procured. Currently in the Compliance Period 3 (2017-2020), Roseville has procured 25% of its energy supply from renewable resources for 2017-2018, and is on target to meet the 33% target by 2020. Further, Roseville’s RPS contracts are forecasted to fulfill compliance requirements under current law through 2024, including contracts with Silicon Valley Power, Powerex Corporation, Avangrid Renewables, Lost Hills Solar, Blackwell Solar, as well as grandfathered resources including geothermal and small hydroelectric projects. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – *California Renewables Portfolio Standard*” in the front part of this Remarketing Memorandum for more information on SBX1-2, SB 350 and SB 100.

Open Market Term Purchase and Sale Agreements

Roseville enters into various fixed-price purchase or sale contracts on the open market at various times to meet its power supply requirements and hedge its portfolio costs consistent with its risk management policies. Purchases include transactions to hedge natural gas and electricity, physically or financially, over various tenors authorized in Roseville’s Trading Authority Policy. Electricity and gas products are generally purchased or sold on a seasonal or annual basis, to comply with Roseville’s Energy Hedge Policy (described below). Roseville transacts through a competitive bid process with a number of counterparties in line with its Credit Risk Policy. See “– Power Supply Risk Management” below.

Future Power Supply Resources

In addition to the above supply sources, Roseville expects that it will obtain additional resources from market purchases or investment in generation facilities, either independently, through NCPA or through other agencies. In accordance with current State law, Roseville expects that future energy purchases will increasingly be made from renewable energy sources. See “– Energy Efficiency and Conservation” below. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings” in the front part of this Remarketing Memorandum.

Power Supply Risk Management

Roseville has a rigorous risk management program to mitigate business and financial risks through prudent oversight, policies, and sufficient controls. Roseville established a Risk Oversight Committee (“ROC”), to provide oversight of risk management policy compliance and procedures. The ROC includes two members of the City Council, two members of the Roseville Public Utilities Commission, the City Manager, the Assistant City Manager, the Chief Financial Officer, the City Attorney, and the Electric Utility

Director. The ROC meets quarterly to review energy trading activities and to ensure their adherence to the risk management policies.

All energy purchases are made in accordance to Roseville’s energy risk policies. The Energy Hedge Policy is designed to reduce energy rate volatility and to maintain rates within reasonable tolerances. The Energy Hedge Policy establishes financial and volumetric hedge limits to mitigate market price exposure. Specifically, the policy requires the following fixed price energy contracts to be procured in advance on a rolling three- year horizon, as a percentage of overall energy supply forecast:

Rolling Year	Minimum Hedged Supply	Maximum Hedged Supply
1	90%	110%
2	70%	100%
3	45%	80%

The policy requires that Roseville purchase forward electric contracts and/or forward gas contracts to fulfill its long-term hedged supply requirement. In the event of decreases in expected sales levels, the policy may require that Roseville sell forward electric gas and/or electric contracts. Authorized electric and gas transactions are defined in Roseville’s Energy Trading Authority Policy, and executed within its Energy Credit Risk Policy. For the period January 1, 2018 through December 31, 2020, Roseville has fixed the price of approximately 4.8 million MMBtu of natural gas and over 1,250 GWh of electricity. These financial contracts are divided among Bonneville Power Administration, Conoco Philips, J Aron and Company, Macquarie Energy, United Energy Trading, Exelon, and Shell Energy.

Fuel Supply; Natural Gas Prepayment

Natural gas is the primary fuel of Roseville’s REP and RPP2. See “– Sources of Power Supply.” In early 2007, Roseville undertook a prepaid gas procurement arrangement through the Roseville Natural Gas Financing Authority, pursuant to which such Authority entered into a 20-year pre-paid natural gas supply contract with Merrill Lynch Commodities Inc. (“MLCI”) for the supply of natural gas to Roseville. The natural gas Roseville is obligated to purchase under the pre-paid gas supply agreement with the Roseville Natural Gas Financing Authority provides approximately 40% of Roseville’s expected gas requirements for the REP. The natural gas supply contract provides Roseville with seasonally adjusted fixed monthly quantities of gas at a discounted monthly index price.

The fuel supply for Roseville’s gas-fired generation facilities is delivered to Roseville through PG&E’s natural gas pipeline system. See “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – PG&E Bankruptcy” in the front part of this Remarketing Memorandum.

Regional Transmission Facilities

Western Area Power Administration Network Integrated Transmission Service Agreement (“NITS”). Roseville’s electric system interconnects with the transmission system of Western. The Western transmission system is part of the Balancing Authority of Northern California (“BANC”) balancing authority area and interconnects with the CAISO Controlled Grid. Roseville imports all of its requirements not met by the Roseville Energy Park and the Roseville Power Plant 2 over the Western transmission system. Roseville contracts for transmission service to meet its load under a NITS contract that expires on December 31, 2024. This contract provides for imports of electricity from various delivery points to provide delivery into Roseville’s electric system. Roseville pays a proportionate share of Western’s cost for operating and maintaining the system, which is currently \$3.5 million per year.

Balancing Authority of Northern California. BANC is a joint powers authority consisting of the Sacramento Municipal Utility District (“SMUD”), the Modesto Irrigation District, Roseville, the City of Redding, the Trinity Public Utility District, and the City of Shasta Lake. A balancing authority performs a balancing function in which customer usage and resources are matched on a moment-by-moment basis. In addition, a balancing authority operates the transmission system, monitoring power lines to ensure they are operated within the reliable limits of the system in addition to coordinating the operation with neighboring balancing authorities. SMUD acts as the balancing authority operator for BANC under contract. With a peak electricity demand of around 5,000 MW, BANC is the third largest balancing authority in California, serving 763,000 retail customers, and includes more than 1,700 miles of high voltage transmission lines. Roseville represents approximately 7% of the total BANC member load.

California Independent System Operator Controlled Grid. The CAISO provides a market for Roseville to purchase its incremental energy needs, and in which to sell the output of its entitlements in NCPA’s generating units, and contract purchases. Under current CAISO operating protocols, Roseville pays per MWh charges for uses of the transmission system for exports from CAISO.

TANC California-Oregon Transmission Project (“COTP”). Roseville is a member of the Transmission Agency of Northern California (“TANC”) and has executed an agreement (the “TANC Agreement”) for a participation percentage of TANC’s entitlement of COTP transfer capability. Pursuant to the TANC Agreement, Roseville has a participation share of 2.313% of TANC’s entitlement to transfer capability of the COTP (approximately 29.35 MW) and is responsible for 2.313% of TANC’s COTP operating and maintenance expenses and 2.295 % of TANC’s aggregate debt service on a take-or-pay basis. Roseville’s share of annual debt service continues to the year 2039 and is approximately \$850,000 per year. See also “CITY OF SANTA CLARA – Transmission Resources – *TANC California-Oregon Transmission Project*” for a further description of the COTP and the TANC Agreement.

TANC Tesla-Midway Transmission Service. The southern physical terminus of the COTP is near PG&E’s Tesla Substation in the San Francisco Bay Area. The COTP is connected to Western’s Tracy and Olinda Substations. TANC has arranged for PG&E to provide TANC and its members with 300 MW of firm bi-directional transmission capacity in its transmission system between its Tesla Substation and the Midway Substation (the “Tesla-Midway Service”) under an agreement known as the South of Tesla Principles. Roseville’s share of the Tesla-Midway Transmission Service is 5 MW. This service has not proven valuable to the City and the City has laid off its rights to this services to other TANC members through 2024.

Roseville Distribution System

Roseville owns and operates the electrical distribution system serving retail customers within the City of Roseville boundaries. The distribution system is connected to the Western transmission system at two connection points, the 230-kV Berry Street Receiving Station and the 230-kV Fiddymont Station. The distribution system consists of over 145 miles of overhead lines, over 765 miles of underground lines, 57 fiber circuit miles, and 17 substations. Roseville performs continued maintenance on its distribution system to sustain service reliability.

Dispatch and Scheduling

Roseville contracts with ACES Power Marketing (“ACES”) to provide scheduling services and has discontinued its participation in the NCPA Power Pool. NCPA continues to dispatch the NCPA power plants to meet the schedules of energy delivery prepared and submitted by ACES on Roseville’s behalf. NCPA provides dispatch service from its Central Dispatch Center located at its headquarters in Roseville.

Energy Efficiency and Conservation

In 1996, California Assembly Bill 1890 (“AB 1890”), the California electric utility deregulation law, required the establishment of public benefit programs for investor-owned and public power utilities through 2001. In 2006, Assembly Bill 2021 further required power utilities to set yearly goals for the actual amount of energy efficiency savings (in kWh) to be procured. These requirements have been further codified as part of the California Public Utilities Code. The California Public Utilities Code does not set an expiration/sunset date on these requirements for public power utilities. Roseville funds these programs at a minimum of 2.85% of budgeted yearly revenues (approximately \$4.0 million in Fiscal Year 2018-19).

Roseville has developed a full portfolio of public benefits programs for the Electric System since 1996, addressing the following areas of concentration required by State law: energy efficiency programs, renewable energy production, demand reduction, advanced electric technology demonstration, research and development, and low income assistance programs. Residential and commercial energy efficiency offerings focus primarily on summer period consumption reduction and include programs for both existing facilities and new construction.

Under California Assembly Bill 2021, Roseville is required to develop ten year plans for energy efficiency goals and report on these goals to the California Energy Commission (“CEC”) with updates every four years (as recently amended from every three years). The CEC has the obligation to develop energy efficiency goals for the entire State, after consultation with utilities and others. The Roseville Electric System participates in the State effort, and the Roseville City Council approved the ten-year energy efficiency goals most recently in March 2017.

California Senate Bill 1037, signed into law in September 2005, established several important policies regarding energy efficiency. Among the many provisions of the law is a Statewide commitment to cost-effective and feasible energy efficiency, with the expectation that all utilities consider energy efficiency before investing in any other resources to meet growing demand. Roseville is required to report annually to its customers and to the CEC, its investment in energy efficiency and demand reduction programs. Roseville continues its commitment to energy efficiency and is in compliance with these requirements.

For a more detailed discussion of certain California legislation in recent years relating to the electric energy market, see “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings” in the front part of this Remarketing Memorandum.

Employees

General. As of January 1, 2019, 151 City of Roseville authorized positions were assigned specifically to the Electric System. Certain functions supporting the Electric System operations, including meter reading, customer billing, collections and accounting, are performed by the Finance Department of the Roseville.

The bulk of the non-management City personnel working at the Electric System are represented by the International Brotherhood of Electrical Workers (“IBEW”). The IBEW contract expired December 31, 2018. Until a successor contract is executed, the terms of the expired contract will continue to govern. Bargaining is ongoing and there have been no strikes or other work stoppages at Roseville, including at the Electric System.

Pension Plans. Substantially all permanent Roseville employees, including those employees assigned to the Electric System, are eligible to participate in pension plans offered by the California Public Employees Retirement System (“CalPERS”), an agent multiple employer defined benefit pension plan.

CalPERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members, who must be public employees and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public employers within the State. CalPERS issues a separate comprehensive annual financial report. Copies of the CalPERS annual financial report may be obtained from the CalPERS Executive Office, 400 Q Street, Sacramento, California 95814.

CalPERS is a contributory plan deriving funds from employee contributions as well as from employer contributions and earnings from investments. Employees of the Electric System participate in the CalPERS Miscellaneous Plan, and the Electric System pays a percentage of Roseville’s Miscellaneous Plan expenses based on the number of employees. Active Miscellaneous Plan members hired prior to January 1, 2013 are required to contribute 8.00% of their annual covered salary and those hired on or after January 1, 2013 are required to contribute 6.25% of their annual covered salary. The member contribution can be paid by the employee or by Roseville on the employee’s behalf in accordance with applicable labor agreements. The required member contributions are currently paid by the employees. Roseville’s employer contribution rate is determined annually by the actuary effective on the July 1 following notice of a change in rate. Funding contribution amounts are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Roseville is required to contribute the difference between the actuarially determined amount and the contribution rate of employees. The actuarial methods and assumptions used are those adopted by the CalPERS Board of Administration. The contribution requirements of the plan members are established by State statute and the employer contribution rates are established, and may be amended, by CalPERS.

The table below sets forth Electric System’s allocated share of Roseville’s required contributions to the Miscellaneous Plan for the past four Fiscal Years. The Electric System’s estimated allocated share of Roseville’s budgeted contributions to the Miscellaneous Plan for the Fiscal Year ending June 30, 2019 is \$5,435,071.

City of Roseville Miscellaneous Plan			
Fiscal Year	Electric System Allocated Share of Contributions	Total City Contribution Amount	Contributions as a % of Covered Payroll
2014-15	\$3,375,790	\$15,872,491	22.49%
2015-16	3,884,489	17,564,085	23.69
2016-17	4,699,119	19,896,723	26.54
2017-18	4,463,913	18,499,075	23.96

Source: City of Roseville.

Roseville’s required contributions to CalPERS fluctuate each year and include a normal cost component and a component equal to an amortized amount of the unfunded liability. Many assumptions are used to estimate the ultimate liability of pensions and the contributions that will be required to meet those obligations. The CalPERS Board of Administration has adjusted and may in the future further adjust certain assumptions used in the CalPERS actuarial valuations, which adjustments may increase Roseville’s required contributions to CalPERS in future years. Accordingly, Roseville cannot provide any assurances that Roseville’s required contributions to CalPERS in future years will not significantly increase (or otherwise vary) from any past or current projected levels of contributions.

On December 21, 2016, the CalPERS Board of Administration voted to lower the pension plan’s assumed rate of return for purposes of its actuarial valuations from 7.5% to 7.0% by 2020 (which reduction will be phased in over the period from Fiscal Year 2017-18 to 2019-20). CalPERS has estimated that with a reduction in the rate of return to 7.0%, most employers could expect a 1% to 3% increase in the percentage

of payroll contribution for the normal cost for miscellaneous plans. In addition, CalPERS has estimated that employers could expect gradual increases in their unfunded accrued liability payment, reaching an approximate increase in such payment (relative to the unfunded accrued liability payments projected in the June 30, 2015 valuation report) of 30% to 40% by Fiscal Year 2024-25 for miscellaneous plans. As a result, required contributions of employers, including Roseville, toward unfunded accrued liabilities, and as a percentage of payroll for normal costs, are expected to increase.

Effective for the Fiscal Year ended June 30, 2015, Roseville adopted Governmental Accounting Standards Board (“GASB”) Statement No. 68 (“GASB No. 68”), affecting the reporting of pension liabilities for accounting purposes. Under GASB No. 68, Roseville is required to report the Net Pension Liability (*i.e.*, the difference between the Total Pension Liability and the Pension Plan’s Net Position or market value of assets) in its financial statements.

The table below summarizes certain information relating to the Net Pension Liability of the Miscellaneous Plan as of June 30, 2014 through June 30, 2017, as reported in Roseville’s audited financial statements. The Electric System’s allocable share of Roseville’s net pension liability was not separately determined.

City of Roseville Miscellaneous Plan					
Measurement Date⁽¹⁾ (June 30)	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Net Position as a % of Total Pension Liability	Net Pension Liability as a % of Covered Payroll
2014	\$513,101,070	\$346,951,083	\$166,149,987	67.62%	245.63%
2015	532,751,723	356,786,987	175,964,736	66.97	249.33
2016	565,400,677	361,251,067	204,149,610	63.89	275.38
2017	632,299,916	403,695,744	228,604,172	63.85	304.95

⁽¹⁾ Measured using prior fiscal year annual actuarial valuation rolled forward to measurement date using standard update procedures.
Source: City of Roseville.

In the June 30, 2016 actuarial valuation utilized for measuring the pension liability as of the June 30, 2017 measurement date, the Entry Age Normal Actuarial Cost Method was used. The actuarial valuation assumptions used for determining total pension liabilities included (a) a 7.5% investment rate of return (net of pension plan investment and administrative expense); (b) projected salary increases that range from 3.3% to 14.2% annually; (c) an inflation component of 2.75% per year; (d) payroll growth of 3.0%; and (e) a discount rate of 7.15%.

Retiree Health Benefits. Roseville also provides post-employment medical benefits (“OPEB benefits”) to substantially all retirees, including those assigned to the Electric System, under the City of Roseville Retiree Healthcare Plan, a sole employer defined healthcare plan administered by the Trust Investment Review Committee. Roseville is responsible for establishing and amending the funding policy of the plan. Roseville manages the plan by investing assets in a Retiree Health Plan Trust (the “OPEB Trust”), established pursuant to a Trust Agreement, and managed by the OPEB’s Trust Administrator, PFM Asset Management LLC. As of June 30, 2018, there were 726 participants receiving OPEB benefits under the plan.

The contribution requirements of plan members and Roseville are established and may be amended by the Roseville City Council. The City Council establishes rates based on an actuarially determined rate.

For Fiscal Years prior to Fiscal Year 2017-18, the City’s reported annual OPEB cost (expense) was calculated based upon the annual required contribution (“ARC”), an amount actuarially determined in

accordance with the parameters of GASB Statement No. 45. The ARC represents the level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over 30 years.

The table below sets forth certain information regarding Roseville’s annual OPEB cost and the approximate portion of such amount funded by the Electric System, the percentage of annual OPEB cost contributed and Roseville’s Net OPEB obligation for the three Fiscal Years 2014-15 through 2016-17.

City of Roseville OPEB Plan				
Fiscal Year Ended June 30	Roseville Annual OPEB Cost⁽¹⁾	Amount Funded by Electric System	% of Annual OPEB Cost Contributed	Net OPEB Obligation
2015	\$ 8,994,201	\$648,594	64%	\$44,461,929
2016	11,471,000	723,472	69	49,633,184
2017	13,717,275	811,548	91	50,971,148

⁽¹⁾ Amounts include both pay-as-you-go contributions and contributions to the OPEB Trust.

Source: City of Roseville.

Effective for Fiscal Year 2017-18, Roseville follows the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (“GASB No. 75”) affecting the reporting of OPEB liabilities for accounting purposes. GASB No. 75 replaces the requirements of GASB Statement No. 45. GASB No. 75 establishes standards for employers with other postemployment liabilities for recognizing and measuring net OPEB liabilities, along with deferred inflows and outflows of resources, and expenses/expenditures related to the other postemployment liability. GASB No. 75 does not affect funding requirements.

The table below sets forth certain information regarding the Electric System’s allocated share of Roseville’s annual contributions to the OPEB Plan for the Fiscal Year ended June 30, 2018, including the relation of Roseville’s contributions to the actuarially determined contribution amount for such fiscal year. The Electric System’s estimated allocated share of Roseville’s budgeted contributions to the OPEB Plan for the Fiscal Year ending June 30, 2019 is \$1,903,117.

City of Roseville OPEB Plan				
Fiscal Year Ended June 30	Contribution Funded by Electric System	Total City Contribution	Actuarially Determined Contribution Amount	Contribution Deficiency (Excess) to Actuarially Determined Contribution
2018	\$2,016,000	\$14,213,477	\$14,213,477	\$0

Source: City of Roseville.

As of June 30, 2018, the total OPEB liability was \$226,908,000 and the OPEB Plan fiduciary net position was \$84,119,640, resulting in a net OPEB liability of \$142,788,360. Plan fiduciary net position as a percentage of the total OPEB liability was 37.07%. The net OPEB liability as a percentage of covered payroll was 126.1%. In the June 30, 2017 actuarial valuation, the Entry Age Normal Actuarial Cost Method was used with a 24-year fixed amortization period and level percentage of pay. The actuarial valuation assumptions used include (a) a 6.25% investment rate of return (net of administrative expense); (b) projected salary increases of 3% annually; (c) an inflation component of 2.75% per year; and (d) a healthcare trend 7.5% for 2019, decreasing to an ultimate rate of 4% in 2076 for non-medicare participants, and 6.5% in 2019, decreasing to an ultimate rate of 4.0% in 2076 for medicare participants.

Additional information regarding the City of Roseville’s retirement plans and other post-employment benefits can be found in Roseville’s comprehensive annual financial reports, which may be obtained at www.roseville.ca.us.

Insurance

Roseville is a member of the California Joint Powers Risk Management Authority (“CJPRMA”), which covers general liability claims, property, and boiler and machinery losses. Once Roseville’s deductible is met, CJPRMA becomes responsible for payment of all claims up to the limit. General liability claims are covered up to \$40,000,000 with a self-insured retention of \$500,000 per claim. For Fiscal Year 2018-19, Roseville’s premium was \$813,836 with an additional \$1,625 charge to reflect the fees to access certain online risk management systems. Total premium cost to Roseville was \$815,461. CJPRMA has purchased commercial insurance against property damage and boiler and machinery claims. Property damage is covered up to \$400,000,000 with a self-insured retention of \$25,000 per claim. For Fiscal Year 2018-19, Boiler and Machinery damage is covered up to \$21,250,000 with a self-insured retention of \$5,000. For Fiscal Year 2018-19, the annual premium cost for both was \$370,651.

Additionally, Roseville maintains insurance coverage for liabilities arising from the Roseville Energy Park Property. The policy has a self-insured retention of \$250,000 per claim up to a \$200,000,000 limit. For the policy term of October 13, 2018 through October 13, 2019, Roseville’s premium was \$501,992. Roseville has also purchased fiduciary insurance specifically to cover the OPEB Trust; see “Employees – *Other Post-Employment Health Benefits*” above. The self-insured retention was \$15,000 per claim up to a \$3,000,000 limit. For the policy term of January 15, 2019 through January 15, 2020, Roseville’s premium was \$35,419.

Roseville is a member of the Local Agency Workers’ Compensation Excess Joint Powers Authority (“LAWCX”), which covers workers’ compensation claims up to \$5,000,000 and provides additional coverage up to statutory limit. Roseville has a self-insured retention of up to \$500,000 per claim. For Fiscal Year 2018-19, Roseville’s premium cost was \$797,173 for current year coverage.

Wildfire Mitigation Measures

Roseville does not independently own any transmission lines, and its owned or co-owned transmission or distribution facilities have not been the cause of any recent wildfires experienced in California. The municipal boundaries of the City of Roseville, the primary geographical area in which the Roseville Electric System’s overhead electrical lines and equipment are located, is not currently within a California Public Utilities Commission (“CPUC”) designated fire-threat area nor a United States Forest Service/California Department of Forestry and Fire Protection (Cal Fire) designated high hazard zone. In 2018, Roseville staff determined, in consultation with the City of Roseville Fire Department, and based upon historical data, local experience and reference to the CPUC’s High Fire Threat District Maps, that there were no portions of the geographical area in which the utility’s overhead electrical lines and equipment are located that posed a significant risk of wildfire resulting from those electrical lines and equipment. As a precautionary measure, Roseville has developed and implemented a utility preparedness plan to address wildland fire sensitive areas and other possible utility emergency events. Elements of the 2018 utility preparedness plan include bolstered inspection practices for overhead electrical assets within the designated city wildland fire sensitive areas, ongoing vegetation management activities, and established protocols and procedures for operations for emergency preparedness and response. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – Legislation Relating to Wildfires; Related Risks” in the front part of this Remarketing Memorandum.

Projected Capital Improvements

Roseville's currently anticipated capital improvements for the Electric System encompasses both improvements to Roseville's electricity distribution system and rehabilitation projects for assets that can no longer provide the necessary service. As shown in the Capital Improvement Summary below, Roseville has planned Electric System capital spending of approximately \$99.9 million over the five Fiscal Years 2018-19 through 2022-23, of which \$22.7 million is included in the Fiscal Year 2018-19 budget. Funds for the additional \$77.2 million will be requested when necessary.

CITY OF ROSEVILLE ELECTRIC SYSTEM CAPITAL IMPROVEMENT SUMMARY

Fiscal Year Ending June 30	Capital Improvement Projects
2018-19	\$22,700,000
2019-20	20,100,000
2020-21	20,500,000
2021-22	18,300,000
2022-23	18,300,000
Total:	\$99,900,000

Source: City of Roseville.

Roseville currently expects to fund the capital expenditures primarily with revenues collected from rates and development fees.

Electric Rates

Rate Setting Procedure. Under the City Charter and State law, Roseville has the exclusive jurisdiction to set electric rates within its service area by ordinance, which requires a majority vote of the City Council. These rates are not currently subject to review by the CPUC or any State or federal agency. The City Council reviews Electric System rates periodically and makes adjustments as necessary.

The City Council is also authorized by the City Charter to set charges, pay for and supply all electric power to be furnished to customers according to such schedules, tariffs, rules and regulations as are adopted by the City Council. The City Charter provides that the City Council will have the power to charge equitable rates for the electric services furnished and for building up the electric properties so as to conserve their value and increase their capacity as needed by Roseville. In addition, the City Charter provides for the maintenance of the electric funds for the Electric System into which is deposited receipts from the operations of the Electric System and from which the costs and expenses of the Electric System are payable.

Service Charges and Demand Charge. Roseville's monthly residential electric rates currently include a \$26.00 basic service charge, the Renewable Energy Surcharge of \$0.0056 per kWh, the Greenhouse Gas Surcharge of \$0.0002 per kWh, plus \$0.0931 per kWh consumed up to 500 kWh, and \$0.1435 per kWh for consumption in excess of 500 kWh. Residential customers meeting certain criteria can apply for special residential rates such as an Electric Rate Assistance Program and Medical Support Rate Reduction.

For small and medium business customers, the monthly basic service charge ranges from \$38.00 to \$65.00, the Renewable Energy Surcharge of \$0.0056 per kWh, the Greenhouse Gas Surcharge of \$0.0002 per kWh, plus \$0.0974 to \$0.1235 per kWh consumed. Medium business customers are also subject to a demand charge of \$6.16 per kW per month.

For large business customers, the monthly basic service charge is \$521.00, the Renewable Energy Surcharge of \$0.0056 per kWh, the Greenhouse Gas Surcharge of \$0.0002 per kWh; and depending on the season, day and hour, time of use energy charges vary from \$0.0682 to \$0.1408 per kWh. Large business customers are also subject to a seasonal demand charge of \$6.60 per kW per month in winter and \$11.57 per kW per month in summer.

For very large business customers, the monthly basic service charge is \$591.00, the Renewable Energy Surcharge of \$0.0056 per kWh, the Greenhouse Gas Surcharge of \$0.0002 per kWh; and depending on the season, day and hour, time of use energy charges vary from \$0.0674 to \$0.1397 per kWh. Very large business customers are also subject to a seasonal demand charge of \$6.71 per kW per month in winter and \$11.51 per kW per month in summer.

A hydroelectric adjustment formula was adopted by the City Council in March 2009, to reflect deviations of precipitation from average conditions that significantly change hydroelectric production. This surcharge may change annually, based on annual hydroelectric conditions, up to a maximum of 5% of total electric charges. As a result of below average precipitation levels from July 2017 through June 2018 there is a \$0.00129/kWh surcharge currently in effect.

Recent History of Electric Rate Adjustments. From Fiscal Year 2014-15 through 2018-19, Roseville’s retail electric rates have increased an average of approximately 0.4% annually. The following table sets forth Roseville’s recent rate change history.

**CITY OF ROSEVILLE
RATE ADJUSTMENTS
Fiscal Years 2014-15 through 2018-19**

Date	Percent Change (Average)
January 1, 2019	0.00%
January 1, 2018	0.00
January 1, 2017	0.00
January 1, 2016	0.00
January 1, 2015	0.00
July 1, 2014	2.00

Source: City of Roseville.

Rate Stabilization Fund

On May 8, 1996, the City Council adopted Resolution No. 96-148, which provides for, among other policies, the establishment of a rate stabilization fund (the “RSF” or “Rate Stabilization Fund”), in order to remain competitive under the then occurring industry-wide restructuring of the electric industry. Such policies also provide for the recovery of capital costs of Roseville’s electric generating assets. On March 18, 2009, the City Council reviewed the financial policy that defines the range of the Rate Stabilization Fund balance, reducing the minimum balance from 60% to 40% of operating expenses. This action was taken in conjunction with the implementation of a hydroelectric rate adjustment mechanism that adjusts electric rates up to 5% without further City Council action when hydroelectric conditions increase or decrease electric operating expenses. See also “– Electric Rates.” The Rate Stabilization Fund has a balance of \$[62] million as of January 1, 2019. *{any update?}* Roseville estimates that under current revenue estimates, the Rate Stabilization Fund is expected to be sufficient to pay for currently anticipated contingencies related to power supply costs.

Indebtedness; Joint Powers Agency Obligations

Roseville Electric System Revenue Certificates and Bonds. As of June 3, 2019, Roseville had outstanding approximately \$[207,725,000] principal amount of certificates of participation and refunding revenue bonds {*Please Update to 6/3/19*} (the “Outstanding Electric System Certificates and Bonds”) that were executed and delivered to finance and refinance improvements to the Electric System. The Outstanding Electric System Certificates and Bonds are payable from certain payments to be made by Roseville under an installment purchase contract (the “Installment Purchase Contract”), the payments under which are payable from and secured by the Net Revenues of the Electric System (“Net Revenues” are defined generally as revenues of the Electric System less the maintenance and operation costs of the Electric System during any 12-month period). These obligations are subordinate to the payments required to be made with respect to Roseville’s obligations to NCPA and TANC described below.

Joint Powers Agency Obligations. As previously discussed, Roseville participates in certain joint powers agencies, including NCPA and TANC. The obligations of Roseville under its agreements with NCPA and TANC constitute operating expenses of the Electric System payable on a senior basis to any of the payments required to be made on Roseville’s Outstanding Electric System Certificates and Bonds. The agreements with NCPA and TANC are on a “take-or-pay” basis, which requires payments to be made whether or not projects are operable, or whether output from such projects is suspended, interrupted or terminated. Certain of these agreements contain “step up” provisions obligating Roseville to pay a share of the obligations of a defaulting participant and granting Roseville a corresponding increased entitlement to electricity (generally, Roseville’s “step-up” obligation is limited to 25% of Roseville’s scheduled payments on such obligations). Roseville’s participation and share of debt service obligation (without giving effect to any “step-up” provisions) for each of the joint powers agency projects in which it participates are shown in the following table.

**CITY OF ROSEVILLE
ELECTRIC SYSTEM
OUTSTANDING DEBT OF JOINT POWERS AGENCIES⁽¹⁾
(Dollar Amounts in Millions)
(As of June 3, 2019)**

	<u>Outstanding Debt⁽²⁾</u>	<u>Roseville Participation⁽³⁾</u>	<u>Roseville Share of Outstanding Debt⁽²⁾</u>
NCPA			
Geothermal Project	\$ 24.5	7.88%	\$ 1.9
Hydroelectric Project	278.4	12.00 ⁽⁴⁾	27.6
Capital Facilities Project	29.6	36.50	10.8
TANC			
COTP	191.8	2.32	4.5
TOTAL*	<u>\$524.3</u>		<u>\$44.8</u>

(1) Excludes Roseville Natural Gas Financing Authority. See “Natural Gas Prepayment” above.

(2) Principal only. Does not include obligation for payment of interest on such debt.

(3) Participation based on actual debt service obligation. Participation obligation is subject to increase upon default of another project participant. Such increase shall not exceed, without written consent of a non-defaulting participant, an accumulated maximum of 25% of such non-defaulting participant’s original participation.

(4) Roseville’s actual payments represent approximately 9.9% of outstanding debt service as a result of credit received by it as a non-participating member with respect to portion of debt obligation.

Note: Numbers may not total due to rounding.

Source: City of Roseville.

A portion of the joint powers agency debt obligations are variable rate debt, liquidity support for which is provided through liquidity arrangements with banks. Unreimbursed draws under liquidity arrangements supporting joint powers agency variable rate debt obligations bear interest at a maximum rate substantially in excess of the current interest rates on such obligations. Moreover, in certain circumstances, the failure to reimburse draws on the liquidity agreements may result in the acceleration of scheduled payment of the principal of such variable rate joint powers agency obligations. In connection with certain of such joint powers agency obligations, the respective joint powers agency has entered into interest rate swap agreements relating thereto for the purposes of substantially fixing the interest cost with respect thereto. There is no guarantee that the floating rate payable to the respective joint powers agency pursuant to each of the interest rate swap agreements relating thereto will match the variable interest rate on the associated variable rate joint powers agency debt obligations to which the respective interest rate swap agreement relates at all times or at any time. Under certain circumstances, the swap providers may be obligated to make payments to the applicable joint powers agency under their respective interest rate swap agreement that is less than the interest due on the associated variable rate joint powers agency debt obligations to which such interest rate swap agreement relates. In such event, such insufficiency will be payable as a debt service obligation from the obligated joint powers agency members (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Roseville). In addition, under certain circumstances, each of the swap agreements is subject to early termination, in which event the joint powers agency could be obligated to make a substantial payment to the applicable swap provider (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Roseville).

Litigation

There is no action, suit or proceeding known to be pending or threatened, restraining or enjoining Roseville in the execution or delivery or performance of, or in any way contesting or affecting the validity of any proceedings of Roseville taken with respect to the Third Phase Agreement.

There is no litigation pending, or to the knowledge of Roseville, threatened, questioning the existence of Roseville, or the title of the officers of Roseville to their respective offices. There is no litigation pending, or to the knowledge of Roseville, threatened, questioning or affecting in any material respect the financial condition of Roseville's Electric System.

Present lawsuits and other claims against Roseville's Electric System are incidental to the ordinary course of operations of the Electric System and are largely covered by Roseville's self-insurance program. In the opinion of Roseville's management and the Roseville City Attorney, such claims and litigation will not have a materially adverse effect upon the financial position of Roseville.

Financial Information

Significant Accounting Policies. Governmental accounting systems are organized and operated on a fund basis. A fund is defined as an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein. Funds are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions or limitations.

The Electric System is accounted for as an enterprise fund. Enterprise funds are used to account for operations (i) that are financed and operated in a manner similar to private business enterprises (where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges) or (ii) where the governing body has decided that periodic determination of revenues earned, expenses

incurred and/or net income is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

The Electric Fund uses the accrual method of accounting. Revenues are recognized when they are earned and expenses are recognized when they are incurred.

Investments are stated at cost. Inventories are valued at weighted average method. Capital assets are recorded at historical cost. Donated fixed assets are valued at their estimated fair market value on the date donated.

Audited Financial Statements. Roseville's most recent Comprehensive Annual Financial Report for Fiscal Year 2017-18 was audited by Vavrinek, Trine, Day & Co., LLP, Sacramento, California, in accordance with generally accepted auditing standards. The audited financial statements contain opinions that the financial statements present fairly the financial position of the various funds maintained by Roseville. The reports include certain notes to the financial statements which are not fully described below. Such notes constitute an integral part of the audited financial statements. Copies of these reports are available on Roseville's website, www.roseville.ca.us.

Historical Revenues, Expenses and Debt Service Coverage

The following table presents a summary of the revenues, expenses, and debt service coverage for Roseville's Electric Fund for Fiscal Years 2013-14 through 2017-18 on a historical basis. This table is based on historic operating results of the Electric System, but is presented on a cash basis consistent with the definitions of revenues and maintenance and operation costs as defined in the Installment Purchase Contract relating to Roseville's Outstanding Electric System Certificates and Bonds, and as such, does not match the audited financial statements of the Electric System. The table also includes a five-year history of balances in the Rate Stabilization Fund, and calculates debt service coverage both with and without taking into account the Rate Stabilization Fund balance.

The table below as it is presented is not available in Roseville's audited financial statements for the Electric System; it has been designed to reflect revenues and coverage in a manner which meets GAAP standards and is reflective of the definitions of revenues and maintenance and operation costs as defined in the Installment Purchase Contract relating to Roseville's Outstanding Electric System Certificates and Bonds. The figures shown in the table are accounted for in Roseville's audited financial statements (for Fiscal Years 2013-14 through 2017-18) but the presentation in the audited financial statements may not necessarily correlate to the line item designations in the table.

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CITY OF ROSEVILLE
ELECTRIC FUND
STATEMENT OF REVENUES AND EXPENSES
Fiscal Years 2013-14 through 2017-18
(Dollars in Thousands)

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>
Revenues					
Charges for Services	\$159,677	\$164,822	\$163,762	\$161,329	\$160,193
Other	2,325	3,508	2,959	4,678	6,904
Total Revenues	<u>\$162,002</u>	<u>\$168,330</u>	<u>\$166,721</u>	<u>\$166,007</u>	<u>\$167,098</u>
Operating Expenses					
Power Supply ⁽¹⁾	\$ 91,793	\$ 90,285	\$ 84,068	\$ 81,204	\$ 77,090
Non-Power Costs ⁽²⁾	19,434	20,933	27,345	36,771	37,470
Indirect Costs and Transfers ⁽³⁾	7,718	8,869	6,975	8,297	3,146
Total Operating Expenses	<u>\$118,944</u>	<u>\$120,087</u>	<u>\$118,387</u>	<u>\$126,272</u>	<u>\$117,706</u>
Net Revenue	\$ 43,058	\$ 48,243	\$ 48,334	\$ 39,735	\$ 49,391
Debt Service	\$ 15,415	\$ 16,176	\$ 16,185	\$ 15,950	\$ 16,672
Adjusted Net Revenue					
Net Revenue	\$ 43,058	\$ 48,243	\$ 48,334	\$ 39,735	\$ 49,391
Interest Revenue (excluding unrealized gain/loss)	603	795	1,212	1,887	2,497
Adjusted Net Revenue	<u>\$ 43,661</u>	<u>\$ 49,038</u>	<u>\$ 49,546</u>	<u>\$ 41,623</u>	<u>\$ 51,889</u>
Debt Service Coverage Ratio	2.83	3.03	3.06	2.61	3.11
Rate Stabilization Fund Balance ⁽⁴⁾	\$47,209	\$50,768	\$58,381	\$58,943	\$58,811
Transfers from/(to) Rate Stabilization Fund	(5,387)	(3,400)	(7,000)	--	--
Debt Service Coverage ratio, including Rate Stabilization Fund ⁽⁵⁾	5.53	5.96	6.24	6.31	6.62

⁽¹⁾ Includes joint powers agency payment obligations.

⁽²⁾ Includes distribution operations and administration expenses, including the Electric System's share of CalPERS costs.

⁽³⁾ Through Fiscal Year 2016-17, includes operating payments to the City General Fund as reimbursement for the Electric System's share of certain overhead expenses such as information technology, meter reading, traffic signals, payroll, human resources, facility lease payments, utility exploration center operations, retired employees' health costs, OPEB costs, citywide rehabilitation costs, etc. As of Fiscal Year 2017-18, most of such costs were moved to Non-Power costs with retired employees' health costs, OPEB costs, and citywide rehabilitation costs remaining on this line. The increase to Non-Power costs was offset by other operational savings.

⁽⁴⁾ Represents available resources as of June 30.

⁽⁵⁾ Pursuant to the Installment Purchase Contract relating to Roseville's Outstanding Electric System Certificates and Bonds, funds on deposit in the Rate Stabilization Fund may be included in Adjusted Annual Revenues for purposes of determining compliance with the Rate Covenant. See "Rate Setting – Rate Stabilization Fund."

Source: City of Roseville.

CITY OF SANTA CLARA

Introduction

The City of Santa Clara (“Santa Clara”) is a charter city located in the State of California (the “State”). Pursuant to its charter, Santa Clara has the power to furnish electric utility service within its service area. In connection therewith, Santa Clara has the powers of eminent domain, to contract, to construct works, to fix rates and charges for commodities or services it provides and to incur indebtedness.

Santa Clara provides electric utility service through its electric utility department. Santa Clara offers its electricity and energy services through the trademarked name of “Silicon Valley Power.” In addition, Santa Clara provides other city services to its inhabitants, including police and fire protection, and water and sewer service.

The legal responsibilities and powers of Santa Clara, including the establishment of rates and charges for electric service, are exercised by the seven-member Santa Clara City Council. The Santa Clara City Council is made up of the Mayor, elected at large, and six council members. The members of the Santa Clara City Council have historically been elected city-wide for staggered four year terms under the provisions of the City Charter. However on July 23, 2018, the Santa Clara County Superior Court issued a statement of decision in the case, *LaDonna Yumori Kaku et al. v. City of Santa Clara*, ordering the City to implement by-district elections for its six council members. Following the court decision, the two Council seats that were up for election in the November 6, 2018 election were elected by district election. The City has appealed the trial court decision.

The Santa Clara electric utility department is under the direction of the Chief Electric Utility Officer who, together with certain other senior managers of the electric utility department, is appointed by and reports to the Santa Clara City Manager.

To provide electric service within its service area, Santa Clara owns and operates an electric system which includes generation, transmission and distribution facilities. Santa Clara also purchases power and transmission services from other providers and participates in other utility type arrangements.

Since 1896, Santa Clara has provided all electric service within an area coterminous with the City of Santa Clara’s boundaries. As of January 1, 2019, Santa Clara had an estimated population of 128,717. For the Fiscal Year ended June 30, 2018, Santa Clara served an average of 55,198 customers per month, had total sales of 3,578 GWh and a peak demand of 586.6 MW. In the Fiscal Year ended June 30, 2018, approximately 93% of Santa Clara’s energy sales were made to commercial and industrial customers.

Only revenues of the Santa Clara electric utility department will be available to pay amounts owed by Santa Clara under the Third Phase Agreement.

The Santa Clara electric utility department’s main office is located at Santa Clara City Hall, 1500 Warburton Avenue, Santa Clara, California 95050, (408) 615-6600. A copy of the most recent audited financial statements of the Santa Clara Electric Utility Enterprise Fund (the “Annual Report”) may be obtained from Manuel Pineda, Interim Chief Electric Utility Officer, at the above address and telephone number, and is also available on Santa Clara’s website at www.siliconvalleypower.com and on the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access system at <http://emma.msrb.org/>. The Annual Report is incorporated herein by this reference. However, the information presented on such website or referenced therein other than the Annual Report is not part of this Remarketing Memorandum, is not incorporated by reference herein and should not be relied upon in making an investment decision with respect to the 2019 Bonds.

Power Supply Resources

The following table sets forth information concerning Santa Clara's power supply resources and the energy supplied by each during the Fiscal Year ended June 30, 2018.

**CITY OF SANTA CLARA
ELECTRIC UTILITY DEPARTMENT
POWER SUPPLY RESOURCES
(For the Fiscal Year Ended June 30, 2018)**

Source	Capacity Available (MW)	Recorded Energy (GWh)	Percent of Total Energy
City-Owned Generating Facilities ⁽¹⁾			
Cogeneration	7.0	43.49	1.2%
Stony Creek Hydro System	11.6	9.81	0.3
Gianera Generating Station	49.5	5.87	0.2
Grizzly Project	17.7	29.78	0.8
Donald Von Raesfeld Power Plant	147.8	768.52	20.6
Jenny Strand Solar Park	0.1	0.20	0.0
Purchased Power: ⁽²⁾			
Western Area Power Administration			
(Western) ⁽³⁾	136.0	277.17	7.4
Manzana Wind	50.0	136.16	3.6
G2 (Landfill)	1.6	12.59	0.3
Ameresco (Landfill)	0.8	2.81	0.1
Ameresco FWD (Landfill)	4.2	30.85	0.8
Ameresco VASCO (Landfill)	4.3	32.77	0.9
TriDam-Beardsley	11.5	68.76	1.8
TriDam-Donnells	72.0	225.13	6.0
TriDam-Tulloch	25.9	139.24	3.7
TriDam-Sandbar	16.2	98.23	2.6
Rosamond (Recurrent Solar)	20.0	59.36	1.6
Graphics Packaging	27.7	57.24	1.5
Friant 1	25.0	110.32	3.0
Quinten Luallen (Friant 2)	7.3	50.46	1.3
Santa Clara Tioga Canopy	0.4	0.46	0.0
Joint Power Agencies ⁽²⁾			
NCPA			
Geothermal Project	55.7	347.04	9.3
Combustion Turbine Project	31.0	6.34	0.2
Hydroelectric Project	93.6	177.97	4.8
Lodi Energy Center Project	77.9	276.41	7.4
Seattle City Light ⁽⁴⁾	32.6	(21.1)	(0.6)
M-S-R PPA			
San Juan ⁽⁵⁾	51.0	196.89 ⁽⁵⁾	5.3
Big Horn I Wind Energy	105.0	269.76	7.2
Big Horn II Wind Energy	17.0	42.78	1.1
Market Purchases	--	278.40	7.5
Total ⁽⁶⁾	1,100.4	3,733.4	100.0%

⁽¹⁾ Rated or name-plate capacities.

⁽²⁾ Capacity available represents entitlements, firm allocations and contract amounts.

⁽³⁾ Santa Clara purchased varying amounts of capacity from the Western Area Power Administration during the year.

⁽⁴⁾ Santa Clara received 32.6 MW under this contract during the months of June through October and was obligated to provide 25 MW to Seattle City Light from December through mid-April each year. The SCL-NCPA agreement terminated effective May 31, 2018. For Fiscal Year 2017-18, Santa Clara returned 21 GWh hours more than received from Seattle City Light.

⁽⁵⁾ M-S-R PPA ceased to have an ownership interest in the San Juan Unit No. 4 effective December 31, 2017. See "-- Joint Powers Agency Resources - M-S-R PPA Purchased Power - San Juan" below.

⁽⁶⁾ Columns may not add to totals due to rounding.

Source: City of Santa Clara.

Generating Facilities

Cogeneration. Santa Clara owns and operates a cogeneration plant which began operation in 1981. The cogeneration plant provides steam for sale to a paperboard plant within Santa Clara and delivers power to Santa Clara's electric distribution system. Santa Clara upgraded this plant to obtain a new name-plate rating of 7.0 MW, effective July 1995. Fuel for the cogeneration plant (natural gas) is generally acquired under term contracts at prices fixed for the contract term. For the Fiscal Year ended June 30, 2018, the cogeneration plant generated 43.49 GWh of energy.

Stony Creek Hydroelectric System. Santa Clara owns and operates three hydroelectric plants consisting of (i) a 4.9 MW hydroelectric generating plant located at the United States Bureau of Reclamation Stony Gorge Dam near Willows, California, which was completed in 1985, (ii) a 6.2 MW hydroelectric generating plant located at the United States Army Corps of Engineers' Black Butte Dam near Orland, California, which was completed in late 1988, and (iii) a 0.53 MW hydroelectric generating plant located at the Orland Unit Water Users' Association High Line Canal/South Side Canal drop near the Black Butte dam, which was completed in late 1988. For the Fiscal Year ended June 30, 2018, the Stony Creek hydroelectric plants generated 9.81 GWh of energy.

Gianera Generating Station. Santa Clara owns and operates a nominal 49.5 MW dual fuel (natural gas and fuel-oil) combustion turbine generating plant consisting of two 25 MW units, which were completed in 1986 and 1987, respectively. This generation station is used to help meet Santa Clara's peak load and resource adequacy requirements. For the Fiscal Year ended June 30, 2018, the Gianera Generating Station generated 5.87 GWh of energy.

PG&E Grizzly Project. Pursuant to a 1990 settlement agreement with Pacific Gas and Electric Company ("PG&E"), Santa Clara agreed to finance and own 100% of a 20 MW hydroelectric facility (the "Grizzly Project") located on Grizzly Creek above the North Fork of the Feather River in Plumas County, California. The Grizzly Project operates in combination with the hydroelectric facilities of PG&E's Bucks Creek project. Pursuant to the settlement agreement, Santa Clara became a joint licensee in PG&E's Bucks Creek project. PG&E and Santa Clara are currently engaged in the process for re-licensing the project pursuant to FERC's integrated relicensing project. These proceedings are not currently expected to be impacted by PG&E's recent bankruptcy filing. See, however, "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – PG&E Bankruptcy" in the front part of this Remarketing Memorandum. The construction of the Grizzly Project was financed (and refinanced) through the issuance by Santa Clara of electric system revenue bonds. Pursuant to the settlement agreement, PG&E constructed and operates the Grizzly Project, which was placed into operation in November 1993.

Until the date Santa Clara's ownership of the Grizzly Project is terminated (as described below), Santa Clara will own and receive all energy generated by the Grizzly Project, less transmission losses, as described in the settlement agreement, which reflects a contract capacity amount of 17.66 MW.

The Grizzly Project facilities include a tunnel intake structure, surge tank, steel penstock, powerhouse, turbine, transmission line (nominally rated at 115 kV) for interconnection with PG&E's transmission system, and certain additional switchyard equipment and related facilities. Annual energy generation of the Grizzly Project is estimated at 43.4 GWh in an average water year and 26.1 GWh in dry years. For the Fiscal Year ended June 30, 2018, the Grizzly Project generated 29.78 GWh of energy.

Pursuant to the settlement agreement, Santa Clara's interest in the Grizzly Project may revert to PG&E under certain limited circumstances. In the event of such reversion, Santa Clara will be reimbursed by PG&E for the fair market value of the project or be reimbursed for costs advanced by Santa Clara as provided in the settlement agreement. The earliest possible reverter date under the settlement agreement is November 18, 2027.

Donald Von Raesfeld Power Plant. Santa Clara constructed and placed into commercial operation on March 22, 2005, a 122 MW nominal/147.8 MW peak, natural gas-fired, combined cycle power plant known as the “Donald Von Raesfeld Power Plant” (initially designated by the Santa Clara City Council as the Pico Power Plant). The Donald Von Raesfeld Power Plant is located in an industrial area of Santa Clara, on the site of Santa Clara’s Kifer Receiving Station. The Donald Von Raesfeld Power Plant includes its own switchyard, and connects to an existing 115 kV transmission line that currently crosses the plant site. Natural gas for the Donald Von Raesfeld Power Plant is delivered through an approximately two mile gas pipeline from the local transmission main of PG&E. For the Fiscal Year ended June 30, 2018, the Donald Von Raesfeld Power Plant generated 768.52 GWh of energy. The Donald Von Raesfeld Power Plant took both combustion turbine units down in April for a two week planned outage; however during the outage, it was discovered that Unit 1 needed a rotor replacement. Unit 2 went back in to production after the planned outage and Unit 1 remained on outage until the rotor was replaced in mid-August. Santa Clara has long-term agreements with EDF Trading North America and M-S-R Energy Authority (“M-S-R EA”) in place for a significant portion of the plant’s fuel requirements, and actively manages the quantity and price risks associated with fuel supply quantities not under long-term agreement. See “– Fuel Supply” below. Fully baseloaded, the Donald Von Raesfeld Power Plant could generate approximately 1,000 GWh of energy per year. However, Santa Clara substitutes market purchases when it is economical to do so.

Jenny Strand Solar Park. Santa Clara originally entered into an agreement with MiaSole, a California corporation, on December 6, 2011 for the purpose of having MiaSole donate one thousand (1,000) solar modules to Santa Clara at no cost to Santa Clara. On February 1, 2015, the original party “MiaSole” transferred ownership to MiaSole Hi-Tech Corp. MiaSole Hi-Tech Corp provided 1,121 solar modules to Santa Clara, at no cost to Santa Clara, to further Santa Clara’s ability to provide renewable power. For the Fiscal Year ended June 30, 2018, Santa Clara received 0.20 GWh of energy from the solar modules.

Joint Powers Agency Resources

NCPA Geothermal Project. Santa Clara has purchased from NCPA, pursuant to power sales contracts, 54.65% and 34.13% entitlement shares, respectively, in the capacity of NCPA’s Geothermal Project Plant 1 and Plant 2, and is obligated to pay 44.39% of the debt service and operating costs associated with such plants and steam field. The Geothermal Project power sales contracts are “take-or-pay” power sales contracts which require payments to be made whether or not the project is operable. Santa Clara’s payments to NCPA under such power sales contracts, including debt service on NCPA’s Geothermal Project revenue bonds, constitute an operating expense of Santa Clara’s electric system. Each participant in NCPA’s Geothermal Project is responsible under its power sales contracts for paying its capacity share of all of NCPA’s costs of the Geothermal Project, including debt service on the NCPA Geothermal Project revenue bonds, and subject to a “step-up” obligation of up to 25% upon the unremedied default of another NCPA Geothermal Project participant. Santa Clara is currently taking delivery of its share of the capacity and associated energy from the Geothermal Project. Santa Clara’s share of the current California Independent System Operator Corporation (“CAISO”) maximum rated capacity of the project is 71.7 MW. For the Fiscal Year ended June 30, 2018, Santa Clara received 347.04 GWh of electric energy from the Geothermal Project. Current expectations are that the output from the plant will decrease gradually over time. These anticipated decreases are not material to Santa Clara’s supply and can be replaced by additional short-term purchases, additional generation or reduced wholesale sales. For a further description of such resource, see “OTHER NCPA PROJECTS – Geothermal Project” in the front part of this Remarketing Memorandum.

NCPA Combustion Turbine Project No. 1. Santa Clara has purchased a 25% entitlement share in NCPA’s Combustion Turbine Project pursuant to a power sales contract with NCPA, which was amended to reflect that Santa Clara’s 25% share comes specifically from the two Alameda plants and the one Lodi plant. Santa Clara uses this entitlement for resource adequacy purposes and to meet peak load requirements.

Santa Clara delivers this entitlement to its electric system in accordance with CAISO tariffs. For the Fiscal Year ended June 30, 2018, Santa Clara received 6.34 GWh of electric energy from the Combustion Turbine Project. For a further description of such resource, see “OTHER NCPA PROJECTS – Combustion Turbine Project Number One” in the front part of this Remarketing Memorandum.

NCPA Hydroelectric Project. Pursuant to a power sales contract (the “Third Phase Agreement” as referred to in the front part of this Remarketing Memorandum), Santa Clara has purchased from NCPA a 37.02% entitlement share in NCPA’s Hydroelectric Project (including a 1.16% entitlement share laid off to Santa Clara from the cities of Biggs and Gridley). The Hydroelectric Project power sales contract is a “take-or-pay” power sales contract which requires payments to be made whether or not the project is operable. Santa Clara’s payment to NCPA under such power sales contract, including debt service on NCPA’s Hydroelectric Project revenue bonds, constitute an operating expense of Santa Clara’s electric system. Each participant in NCPA’s Hydroelectric Project is responsible under its power sales contract for paying its entitlement share in the Hydroelectric Project of all of NCPA’s costs of the Hydroelectric Project, including debt service on the NCPA Hydroelectric Project revenue bonds as well as a “step-up” of up to 25% in the event of the unremedied default of another project participant. Santa Clara is using its Hydroelectric Project entitlement to serve peak load and to provide capacity to support non-firm purchases of energy at market prices. Santa Clara receives this entitlement to its system by using transmission service available under its Metered Subsystem Agreement (“MSS Agreement”) with the CAISO. For the Fiscal Year ended June 30, 2018, Santa Clara received 177.97 GWh of electric energy from the NCPA Hydroelectric Project. For a further description of such resource, see “THE HYDROELECTRIC PROJECT” in the front part of this Remarketing Memorandum.

NCPA Lodi Energy Center. Pursuant to a power sales agreement (the “LEC Power Sales Agreement”), Santa Clara has purchased from NCPA a 25.75% generation entitlement share of the capacity and energy of the Lodi Energy Center on an unconditional take-or-pay basis, and is obligated to pay 25.75% of NCPA’s Lodi Energy Center operating and maintenance expenses and 46.16% of the debt service for the Lodi Energy Center Revenue Bonds, Issue One. Santa Clara’s obligations to make payments to NCPA under the LEC Power Sales Agreement are not dependent upon the operation of the Lodi Energy Center and are not subject to reduction. Upon an unremedied default by one Indenture Group A Participant (being all of the LEC Project Participants (as defined in the front part of this Remarketing Memorandum) other than Modesto Irrigation District (“MID”) and the California Department of Water Resources (“CDWR”)) in making a payment required under the LEC Power Sales Agreement, the nondefaulting Indenture Group A Participants are required (except as lay-offs are made pursuant to the LEC Power Sales Agreement) to increase pro-rata their participation percentage by the amount of the defaulting Indenture Group A Participant’s entitlement share, provided that no such increase can result in a greater than 35% increase in the participation percentage of the nondefaulting Indenture Group A Participants. Santa Clara receives this entitlement to its system by using transmission service available under its MSS Agreement with the CAISO. For the Fiscal Year ended June 30, 2018, Santa Clara received 276.41 GWh of electric energy from the Lodi Energy Center. For a further description of such resource, see “OTHER NCPA PROJECTS – Lodi Energy Center Project” in the front part of this Remarketing Memorandum.

NCPA–Seattle City Light (“SCL”) Exchange Agreement. NCPA, on behalf of Santa Clara and certain other NCPA members entered into a seasonal exchange agreement (the “SCL-NCPA Exchange Agreement”) with Seattle City Light (“SCL”), deliveries under which commenced on June 1, 1995. In 2008, Santa Clara took over a share of the SCL-NCPA Exchange Agreement from certain other NCPA members. As a result, pursuant to the SCL-NCPA Exchange Agreement, Santa Clara received 32.6 MW from SCL during the months of June through October each year, and was obligated to provide 25 MW to SCL from December through mid-April each year. The SCL-NCPA exchange agreement terminated effective May 31, 2018. For a further description of such resource, see “OTHER NCPA PROJECTS – Power Purchase and Natural Gas Contracts – Seattle City Light Exchange Agreement” in the front part of this Remarketing Memorandum.

M-S-R PPA Purchased Power–San Juan. Santa Clara, along with MID and the City of Redding (“Redding”), is a member of a California joint powers agency known as the M-S-R Public Power Agency (“M-S-R PPA”). On December 31, 1983, M-S-R PPA purchased a 28.8% (approximately 146 MW) ownership interest in Unit No. 4 of the San Juan Generating Station (the “M-S-R PPA San Juan Unit No. 4 Interest”). San Juan Unit No. 4 is a coal-fired steam electric generating unit with a net generating capability of 507 MW (as of December 31, 2017), located in San Juan County, New Mexico, which was constructed and is operated by Public Service Company of New Mexico (“PNM”). San Juan Unit No. 4 is one of four generating units that together make up the San Juan Generation Station. M-S-R PPA financed the acquisition of its M-S-R PPA San Juan Unit No. 4 Interest, and certain costs of related transmission arrangements, through the issuance of San Juan Project revenue bonds, of which \$98.9 million principal amount was outstanding as of June 3, 2019. M-S-R PPA began dispatching power from the San Juan Ownership Interest in May 1995. M-S-R PPA divested its M-S-R PPA San Juan Unit No. 4 Interest on December 31, 2017, although it retains certain liabilities for a share of the costs of plant decommissioning and mine reclamation, all as described below.

Santa Clara purchased from M-S-R PPA, on a take-or-pay basis, a 35% entitlement share (approximately 51.1 MW of capacity and associated energy) in the M-S-R PPA San Juan Unit No. 4 Interest pursuant to a power sales agreement (the “M-S-R PPA Agreement”), among M-S-R PPA and its members.

The M-S-R PPA San Juan Unit No. 4 Interest was initially purchased to provide baseload power to the M-S-R PPA members and to act as a hedge against the rising costs of wholesale power purchases. Santa Clara utilized its entitlement share of capacity and associated energy from the M-S-R PPA San Juan Unit No. 4 Interest from May 1995 through December 2017 either in its own system or for lay-offs or other transactions with third parties. For the Fiscal Year ended June 30, 2018, Santa Clara received 196.89 GWh of electric energy from the M-S-R PPA San Juan Unit No. 4 Interest.

Regulatory changes and conditions in the last decade impacted the costs and operations of the San Juan Generating Station. In addition to the implementation of California’s cap-and trade program, California legislation was enacted to restrict new investments in baseload fossil fuel electric resources, such as the San Juan Unit 4. See “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – *GHG Emissions Performance Standard and Financial Commitment Limits*” in the front part of this Remarketing Memorandum. Further, regulatory proceedings and other related litigation concerning the application of federal Clean Air Act requirements at the San Juan Generating station were ongoing for a number of years. Following the release of a State Implementation Plan (“SIP”) by the State of New Mexico and a Federal Implementation Plan (“FIP”) by the United States Environmental Protection Agency (the “EPA”) to address visibility impacts of the project, during 2012 and early 2013, PNM, as the operating agent for the San Juan Generating station, engaged in discussions with the New Mexico Environment Department (“NMED”) and the EPA regarding an alternative plan to the FIP and SIP. Following approval by a majority of the other San Juan Generating Station owners (the “San Juan Participants”), on February 15, 2013, PNM, the NMED and the EPA agreed to pursue a plan that would result in the retirement of the San Juan Generating Station Units 2 and 3 by the end of 2017 and the installation of selective non-catalytic reduction technology on Units 1 and 4 by the later of January 31, 2016 or 15 months after EPA approval of a revised SIP, which installation was completed in January 2016.

In connection with the implementation of the revised plan and the planned retirement of the San Juan Generation Station Unit Nos. 2 and 3, certain San Juan Participants, including M-S-R PPA, expressed a desire to exit their ownership in the plant. On June 20, 2014, representatives of the nine San Juan Participants reached an initial non-binding agreement in principle on the ownership restructuring of the San Juan Generation Station. At its July 22, 2015 meeting, the M-S-R PPA Commission approved a number of agreements (the “San Juan Restructuring Agreements”) to provide for the interests of M-S-R PPA and certain other San Juan Participants (the “exiting participants”) in the San Juan Generation Station to be transferred to the remaining San Juan Participants effective December 31, 2017. In addition to the

ownership divestiture, the San Juan Restructuring Agreements provide for, among other things, the allocation of ongoing responsibility for decommissioning costs, mine reclamation costs and any environmental remediation obligations among the exiting participants and the remaining San Juan Participants, and the establishment and funding of mine reclamation and plant decommissioning trust funds. The San Juan Restructuring Agreements were subsequently executed by all nine San Juan Generation Station owners and PNM Resources Development Company (a non-utility affiliate of PNM) and, following receipt of regulatory approvals, became effective on January 31, 2016. Various other implementing agreements and amendments to existing San Juan project agreements to effect the restructuring have also been executed. Closing of the ownership restructuring of the San Juan Generation Station and the divestiture of M-S-R PPA's interests in San Juan Unit No. 4 was completed on schedule on December 31, 2017.

As noted above, M-S-R PPA and the other exiting participants retain certain liabilities for a share of the costs of San Juan Generation Station decommissioning and pre-exit date mine reclamation costs. Pursuant to the San Juan Restructuring Agreements, M-S-R PPA was required to deposit approximately \$17.7 million in the mine reclamation trust funds as of December 31, 2017 to fund its currently expected share of ongoing and final reclamation costs, which deposit was made. In addition, under the restructuring agreements, M-S-R PPA will be required to deposit approximately \$2.3 million in the decommission trust fund by December 31, 2022 to fund its currently expected share of the initial work for known asset removal and remediation activities in connection with decommissioning of the San Juan Generation Station. Funds currently on deposit at M-S-R PPA are expected to be sufficient to provide for such deposit. However, M-S-R PPA's actual total proportionate share of San Juan Generation Station decommissioning and mine reclamation costs cannot yet be determined and will depend on a number of factors, including, among other things, the date the San Juan Generation Station is ultimately retired from service. Additional deposits to the trust funds may be required in the future if trust earnings are below expectations or if determined necessary by future decommissioning and reclamation costs study updates or applicable requirements (including, for example, if greenfield or brownfield restoration is determined to be required after final cessation of plant operations, which would significantly increase costs of remediation and restoration). As part of the settlement among the San Juan Participants to achieve approval of the Restructuring Agreements, all parties retained or assumed proportionate liability for any such costs whenever occurring in the future. Until the actual total overall costs of plant decommissioning and mine reclamation are finally determined, no assurance can be given that additional contributions will not be required from the M-S-R PPA members, including Santa Clara, to fund such amounts due. Santa Clara will be responsible for its proportionate share of any future M-S-R PPA liabilities for San Juan Generation Station decommissioning and reclamation in accordance with its 35% entitlement share of the M-S-R PPA San Juan Unit No. 4 Interest under the M-S-R PPA Agreement.

Pursuant to the M-S-R PPA Agreement, Santa Clara is unconditionally obligated thereunder to pay its entitlement share of all of M-S-R PPA's costs associated with the M-S-R PPA San Juan Unit No. 4 Interest, including debt service on M-S-R PPA's San Juan Project revenue bonds which were issued to finance the acquisition of the M-S-R PPA San Juan Unit No. 4 Interest and any remaining liabilities for decommissioning and mine reclamation of the plant associated with the M-S-R PPA San Juan Unit No. 4 Interest. Santa Clara's payments to M-S-R PPA under the M-S-R PPA Agreement constitute an operating expense of Santa Clara's electric system. Santa Clara's obligations to make payments under the M-S-R PPA Agreement are not dependent upon the operation of the San Juan Unit No. 4 and are not subject to reduction. Pursuant to the M-S-R PPA Agreement, upon failure of any M-S-R PPA member to make any payment thereunder which failure constitutes a default under the M-S-R PPA Agreement, the participation percentage of each non-defaulting member automatically shall be increased for the remaining term of the M-S-R PPA Agreement in proportion to its participation percentage; provided, however, that the sum of such increase for any non-defaulting member shall not exceed 25% of its original participation percentage.

Santa Clara plans to replace the energy provided by the M-S-R PPA San Juan Unit No. 4 Interest with energy from the Lodi Energy Center, and a number of power purchase agreements that Santa Clara

has entered into over the last several years, including, Friant Power Facility 1 and Friant Power Facility 2, the Manzana Wind Power Project, and multiple power purchase agreements. Future projects include the Central 40, LLC solar PV project with 40 MW of capacity, and the Altamont Wind Re-power project with 49.5 MW of capacity, both of which have an effective commercial operation date in 2021.

M-S-R PPA Purchased Power – Big Horn Project. In 2005, M-S-R PPA entered into a series of power purchase agreements with Avangrid Renewables LLC (formerly Iberdrola Renewables, Inc.) (“Avangrid”), certain of which agreements have been assigned to Avangrid’s subsidiary, Big Horn I, LLC, for the purchase of energy from the Big Horn I wind energy project (the “Big Horn I Project”) located near the town of Bickleton, in Klickitat County, Washington. The 199.5 MW project consists of 133 1.5 MW GE wind turbines. Santa Clara receives 52.5% of the power purchased by M-S-R PPA from the Big Horn I Project. Santa Clara’s share equates to approximately a 105 MW share of the output at a cost comparable to combined cycle gas-fuel generation. Power deliveries commenced on October 1, 2006 and will continue through September 30, 2026. Through an amendment of the original agreements M-S-R PPA has an obligation to continue to take the same output through September 30, 2031, or if the Big Horn Project is repowered M-S-R PPA will have a right of first offer to negotiate a long-term power purchase for such repowered project. The project interconnects with the high voltage transmission grid through an 11-mile transmission line at Bonneville Power Administration’s (“BPA”) Spring Creek Substation. Through the shaping and firming agreement between M-S-R and Avangrid, Avangrid receives Big Horn energy, as generated, and delivers such energy to M-S-R at the California-Oregon border pursuant to firm pre-established delivery schedules. Santa Clara uses a portion of its transfer capability of the COTP to provide for transmission of the output from the Big Horn I Project from the California-Oregon border. For the Fiscal Year ended June 30, 2018, Santa Clara received 269.76 GWh of energy from the Big Horn I Project.

The Big Horn Project is operated within the BPA balancing authority area. On October 1, 2009, BPA began imposing a wind integration charge for the purpose of recovering its costs to provide within-hour generation balancing services for wind generators. The wind integration charge is currently embodied in BPA’s variable energy resource balancing service and the currently applicable wind integration charge is set at \$1.22/kW-month. M-S-R PPA has entered into a series of amendments of the power purchase agreements with Avangrid whereby M-S-R PPA has agreed to pay, subject to certain caps and limitations, the first \$1.20/kW-month of any wind integration charge imposed by BPA, Avangrid has agreed to pay the next \$1.20/kW-month, and M-S-R PPA and Avangrid will equally split any wind integration charge exceeding \$2.40 per/kW-month. Through a collaborative effort between Avangrid and M-S-R PPA, the Big Horn I Project has obtained California Renewable Portfolio Standard (“RPS”) certification as an “Eligible” renewable resource by the California Energy Commission (the “CEC”). The Big Horn I Project has been registered with the Western Renewable Energy Generation Information System by Avangrid with BPA acting as the Qualified Reporting Entity. The RECs are transferred from Avangrid, the originator, to M-S-R PPA and finally to the members of M-S-R PPA, for either retirement or wholesale sales by such members.

M-S-R PPA subsequently negotiated a 25-year agreement with Avangrid for the purchase of the output from a 50 MW expansion of the Big Horn I Project, the Big Horn II Project. Santa Clara began receiving deliveries from the Big Horn II Project in November 2010. M-S-R PPA will pay the required wind integration charge and pay the cost of necessary transmission to BPA to deliver the output from the facility to a northern California market trading hub. Santa Clara receives 35% of the output from this project, or approximately 17.0 MW of project capacity. For the Fiscal Year ended June 30, 2018, Santa Clara received 42.78 GWh of energy from the Big Horn II Project.

In light of the divestiture of an active ownership interest in San Juan Unit No. 4 as described above, the majority of M-S-R PPA activities after April 2018 will be related to renewables (including the Big Horn Wind energy project described above). Coordinating, regulatory, and compliance services costs will be shared as follows: MID – 40%; Santa Clara – 40%; and Redding – 20%. Renewable administrative services,

electric product, delivery and environmental attribute rights benefits and costs will be shared in accordance with contracted participation ratios.

See also “Indebtedness – Joint Powers Agency Obligations” below for information regarding Santa Clara’s obligations in connection with bonds issued by the joint powers agencies in which it participates.

Purchased Power

Western Purchased Power. On December 14, 2000, Santa Clara signed a 20-year agreement with Western Area Power Administration (“Western”) for the continued purchase of low-cost hydroelectricity from the Central Valley Project (“CVP”), replacing a prior agreement which expired December 31, 2004. The CVP, for which Western serves as marketing agency, is a series of federal hydroelectric facilities in Northern California operated by the United States Bureau of Reclamation. Service under the successor agreement began on January 1, 2005 and continues through December 31, 2024, with Santa Clara receiving a 9.06592% “slice of the system” allocation from Western. Effective April 1, 2015, Western reallocated shares and Santa Clara’s base resource allocation increased to 9.60341%, which shall remain in effect until either superseded by another Exhibit A revision or termination of the agreement. The power marketed by Western to Santa Clara is provided on a take-or-pay basis where Western’s annual costs are allocated to preference customers based on their CVP participation percentage. Western then allocates the annual take-or-pay charges to the preference customers based on a monthly percentage that is designed to reflect the anticipated seasonal energy deliveries. Santa Clara is obligated to its preference customer share of the costs associated with operating the CVP facilities. Under the successor agreement, Santa Clara’s energy allocation dropped from pre-2005 levels of approximately 1,257 GWh to about 359 GWh per year delivered to Santa Clara based upon the hydrology of the CVP. For the Fiscal Year ended June 30, 2018, Santa Clara received 277.17 GWh of energy from Western. Santa Clara’s Donald Von Raesfeld power project, which commenced operation on March 22, 2005, was designed, in part, to offset the expected decrease in energy to be received from Western under the successor agreement beginning in 2005. See “– Generating Facilities – Donald Von Raesfeld Power Plant” above.

Manzana Wind. On February 14, 2012, Santa Clara entered into a 20-year power purchase agreement for 50 MW of the output from Avangrid’s Manzana Wind Power Project in Kern County, California, which began power deliveries in December 2012. For the Fiscal Year ended June 30, 2018, Santa Clara received approximately 136.16 GWh of energy from the Manzana Wind Power Project.

G-2 Energy LLC – Wheatland Landfill. Santa Clara entered into a power purchase agreement for, and began taking delivery of energy in January 2009 from, a 1.6 MW landfill gas facility, G2, near Wheatland, California. For the Fiscal Year ended June 30, 2018, Santa Clara received 12.59 GWh of energy from the G2 project.

Ameresco. On February 12, 2008, Santa Clara entered into a 20-year purchase power agreement with Ameresco for landfill gas generated electricity from the closed municipal landfill located in the city limits of Santa Clara, which includes three microturbines, and is estimated to generate approximately 4,700 MWh per year during the first ten years of the contract and approximately 3,100 MWh per year during the final ten years of the contract. For the Fiscal Year ended June 30, 2018, Santa Clara received approximately 2.81 GWh of energy from the Ameresco landfill project. On May 25, 2010, Santa Clara entered into a second 20-year power purchase agreement with Ameresco for landfill gas generated electricity for 4.6 MW (and potentially up to 9.2 MW) from the Forward landfill in Manteca, California. This project became operational in February 2014. On August 17, 2010, Santa Clara entered into a third 20-year power purchase agreement with Ameresco for landfill gas generated electricity for up to 5 MW from the Vasco Road landfill near Livermore, California. The Vasco Road landfill project became operational in February 2014. For the Fiscal Year ended June 30, 2018, Santa Clara received 30.85 GWh and 32.77 GWh for the Ameresco Forward landfill and Ameresco Vasco Road landfill projects, respectively.

Tri-Dam. In October 2013, Santa Clara entered into a power purchase agreement with the Tri-Dam Project and the Tri-Dam Power Authority to purchase the output from four hydroelectric power plants located on the Middle Fork of the Stanislaus River in Tuolumne County: 72.0 MW Donnell's Powerhouse, 25.9 MW Tulloch Powerhouse, 11.5 MW Beardsley Powerhouse, and 16.2 MW Sandbar Powerhouse. Power deliveries from Donnell's, Tulloch, and Beardsley commenced on January 1, 2014. Power deliveries from Sandbar commenced on January 1, 2017. The agreement is scheduled to terminate on December 31, 2023. For the Fiscal Year ended June 30, 2018, Santa Clara received 68.76 GWh from Beardsley, 225.13 GWh from Donnell's, 139.24 GWh from Tulloch, and 98.23 GWh from Sandbar under this agreement.

Recurrent. On July 14, 2011, Santa Clara entered into a 25-year power purchase agreement for the entire output from the RE Rosamond One LLC project, a 20.0 net MW solar photovoltaic-powered project in Kern County, California, which became operational in December 2013. For the Fiscal Year ended June 30, 2018, Santa Clara received 59.36 GWh of energy from Recurrent.

Graphics Packaging. Graphics Packaging is a manufacturer of recycled paper products that also operated a cogeneration facility within the city limits of Santa Clara. This manufacturing facility and the cogeneration plant was permanently closed in December of 2017, and the power purchase agreement was terminated. For the Fiscal Year ended June 30, 2018, Santa Clara received 57.24 GWh of energy from the Graphics Packaging cogeneration facility.

Friant Power Authority, Facility 1. Santa Clara has executed a power purchase agreement to purchase up to 68,000 MWh per year of electricity over the term of the agreement, from January 1, 2016 to August 31, 2032. Facility 1 consists of three existing run-of-river hydroelectric generating plants: the River Outlet (2 MW), the Friant-Kern (15 MW), and the Madera (8 MW). For the Fiscal Year ended June 30, 2018, Santa Clara received 110.32 GWh of energy from the Friant Power Authority, Facility 1.

Friant Power Authority, Facility 2. Santa Clara has executed a power purchase agreement to purchase the Net Electrical Output from Facility 2, a run-of-the river hydroelectric generating plant, Quinten Luallen Power Plant (7 MW), from July 10, 2012 to December 31, 2032. For the Fiscal Year ended June 30, 2018, Santa Clara received 50.14 GWh of energy from the Friant Power Authority, Facility 2.

Santa Clara Tioga Canopy. On February 2, 2012, Santa Clara entered into a 20-year Power Purchase Agreement with Tioga Solar Santa Clara, LLC. The project is located on Santa Clara's multi-level parking structure on Tasman Drive in the City of Santa Clara. The nameplate capacity of the project is 389.76 kW. For the Fiscal Year ended June 30, 2018, Santa Clara received 0.46 GWh of energy from the solar canopy.

Future Power Supply Resources

Santa Clara has entered into a 20-year power purchase and sale agreement with Samsung, contracted as Central 40, LLC, to develop, own and operate a 40 MW solar PV project located in Stanislaus County. The project is scheduled to be commercially operating as of December 31, 2020. Additionally, Santa Clara commenced a re-power project with S-Power in 2016 at its existing Altamont Wind Project site. S-Power will own and operate 19 MW capacity of wind generation. Two additional power purchase agreements were entered with S-Power under the Rooney Ranch, LLC, including Sand Hill A (13 MW) and Sand Hill B (17.5 MW). In total, the re-power project will be upgraded to meet a 49.5 MW capacity and is scheduled to be commercially operating by December 31, 2020 under a 25-year agreement. Santa Clara has approved the execution of a 20-year power purchase agreement with Viento Loco Wind, LLC for the addition of 200 MW of wind generation from a wind project in New Mexico. The project is expected to be commercially online in the year 2022. This project will add to and further diversify the power portfolio of Santa Clara's resources mix.

Due to Santa Clara’s projected retail demand growth driven primarily from the industrial sector and secondarily from the commercial sector, and to replace existing renewable energy contracts that will expire in the future, Santa Clara is actively exploring new renewable energy projects for procurement. Santa Clara is scoping renewable energy projects in the near term to also make use of the investment tax credit and production tax credit eligibility. Santa Clara is beginning to explore options for the procurement of energy storage and is undergoing economic analysis to understand how to cost-effectively invest in energy storage.

Fuel Supply

Natural gas is the primary fuel and the primary variable operating cost of Santa Clara’s cogeneration plants, Gianera Generating Station and Donald Von Raesfeld Power Plant. See “– Power Supply Resources – Generating Facilities” above. These plants can require delivery of up to 49,000 million British Thermal Units (“MMBtu”) of natural gas per day, with current average daily requirements of 24,400 MMBtu per day. This fuel supply is delivered to Santa Clara through PG&E’s natural gas pipeline system. See “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – PG&E Bankruptcy” in the front part of this Remarketing Memorandum. Santa Clara has developed a comprehensive natural gas program to both manage supply and price volatility. This includes the procurement of a supply of natural gas at a discount from the monthly index price pursuant to a gas prepayment arrangement (described below) and several long-term fixed price contracts for 15,000 MMBtu per day from 2016 to 2019 and 10,000 MMBtu per day in 2020. In addition, Santa Clara currently has in place short-term fixed price contracts for the supply of an additional 10,000 MMBtu per day through October 2019. Excluding the M-S-R EA Gas Supply Agreement (described below) which is not a fixed rate contract, approximately 75% of gas needed for Santa Clara-owned generation is hedged for Fiscal Year 2018-19, and 91% of gas needed for Santa Clara-owned generation is hedged in Fiscal Year 2019-20 (based in each case on the projected gas-fired production for Santa Clara-owned generation facilities during such period).

M-S-R Energy Authority–Gas Prepay. The M-S-R PPA members have formed a joint power agency known as M-S-R EA. In 2009, Santa Clara participated in the M-S-R EA Gas Prepay Project. The M-S-R EA Gas Prepay Project provides, through a Gas Supply Agreement between M-S-R EA and Santa Clara, for a secure and long-term supply of natural gas of 7,500 MMBtu daily (or 2,730,500 MMBtu annually) through December 31, 2012, and 12,500 MMBtu daily (or 4,562,500 MMBtu annually) thereafter until September 30, 2039. The Gas Supply Agreement provides this supply at a discounted price below the monthly market index price (the PG&E Citygate index) over the 30 year term. M-S-R EA entered into a prepaid gas purchase agreement with Citigroup Energy, Inc. (“CEI”) to provide this gas supply, and issued \$500.2 million of its Gas Project Revenue Bonds to finance the prepayment for Santa Clara, all of which were outstanding as of June 3, 2019. Under the terms of the Gas Supply Agreement, M-S-R EA will bill Santa Clara for actual quantities of natural gas delivered each month on a “take-and-pay” basis. Moreover, any default by CEI or the other participants in M-S-R EA’s Gas Prepay Project, MID and Redding, is non-recourse to Santa Clara.

Transmission Resources

TANC California–Oregon Transmission Project. Santa Clara, together with fourteen other northern California cities and districts and one rural electric cooperative, is a member, or associate member, of a California joint powers agency known as the Transmission Agency of Northern California (“TANC”). TANC, together with Redding, Western, two California water districts and PG&E (collectively, the “COTP Participants”) own the California–Oregon Transmission Project (“COTP”), a 339-mile long, 1,600 MW, 500 kV transmission project between southern Oregon and central California. The COTP was placed in service on March 24, 1993, at an original cost of approximately \$430 million. TANC financed its interest in the COTP through the issuance of California–Oregon Transmission Project Revenue Bonds, of which

approximately \$191.8 million principal amount of revenue bonds was outstanding as of June 3, 2019. See “– Indebtedness.”

In April 2008, TANC purchased the COTP transmission assets (approximately 121 MW) of Vernon Light & Power of the city of Vernon, California (“Vernon”), one of the original owners of the COTP. Santa Clara participated in the acquisition of an increased share of transfer capability of the COTP in connection with the acquisition from Vernon by TANC. TANC utilized a combination of cash and the issuance of commercial paper (which was subsequently refunded with taxable fixed-rate bonds) to fund the acquisition of Vernon’s COTP transmission assets (the “Vernon acquisition debt”). Santa Clara, as well as the other acquiring TANC members, began scheduling the acquired COTP transmission transfer capability on April 8, 2008.

Pursuant to Project Agreement No. 3 for the COTP (the “TANC Agreement”), TANC has agreed to provide to Santa Clara and 12 other members of TANC (the “TANC Member-Participants”) a participation percentage of TANC’s entitlement of COTP transfer capability. In return, each TANC Member-Participant has severally agreed to pay TANC a corresponding percentage of TANC’s share of the COTP construction costs, including debt service on TANC’s outstanding revenue bonds and other obligations issued by TANC to finance its ownership share of the COTP. A TANC Member-Participant’s obligations to make payments to TANC are not dependent upon the operation of the COTP and are not subject to reduction. Upon an unremedied default by one TANC Member-Participant in making a payment required under the TANC Agreement, the non-defaulting TANC Member-Participants are required to increase pro-rata their participation percentage by the amount of the defaulting TANC Member-Participant’s entitlement share, provided that no such increase can result in a greater than 25% increase in the participation percentage of the non-defaulting TANC Member-Participants.

Pursuant to the TANC Agreement, Santa Clara’s participation percentage was 20.4745% of TANC’s share of COTP transfer capability (approximately 278 MW net of third party layoffs of TANC). Effective July 1, 2014, Santa Clara laid-off 147 MWs of this entitlement to MID, Turlock Irrigation District and Sacramento Municipal Utility District (“SMUD”) under a 25-year agreement. During the term of this agreement, the parties taking on the entitlement will assume responsibility for all associated debt service, operations and maintenance costs and all administrative and general costs. As a result of the layoff agreement, Santa Clara is currently responsible for paying approximately 10.01% of the operating and maintenance expenses of the COTP and approximately 9.81% of TANC’s COTP debt service. Santa Clara remains contractually obligated for its full participation share. Santa Clara’s payments to TANC under the TANC Agreement, including debt service on TANC’s revenue bonds, constitute an operating expense of Santa Clara’s electric system.

To utilize the full transfer capability of the COTP and the Intertie (described below) on a firm basis between the Pacific Northwest and California, it is necessary to coordinate the operation of all three transmission lines. The Pacific AC Intertie (the “Intertie”) is a two line system which, like the COTP, connects California utilities with those in the Pacific Northwest. The Intertie lines are owned by PG&E, PacifiCorp and Western and are operated by the CAISO. Rate schedules are on file with the Federal Energy Regulatory Commission (“FERC”) to accomplish this coordination. The three-line system comprised of the COTP and the Intertie is collectively referred to as the California-Oregon Intertie (“COI”).

In December 2005, the COTP became part of the SMUD balancing authority area within the Western sub-balancing area authority. In 2011, the operations of the SMUD balancing authority were transferred to the Balancing Authority of Northern California (“BANC”). As a result, the TANC Member-Participants are able to undertake direct scheduling of energy transactions over the COTP within the balancing authority area, free of the CAISO tariff, charges, congestion and encumbrances.

Santa Clara is using a portion of its share of the project transfer capability of the COTP to provide transmission of energy generated from the Big Horn Projects (described under “– Power Supply Resources – Purchased Power”).

TANC Tesla–Midway Transmission Service. The southern physical terminus of the COTP is near PG&E’s Tesla Substation near Tracy, California. The COTP is connected to Western’s Tracy and Olinda Substations. PG&E provides TANC and certain of the TANC members with 300 MW of firm, bi-directional transmission service on its transmission system from its Midway Substation near Buttonwillow, California (the “Tesla-Midway Service”) to those members under a long-term agreement known as the South of Tesla Principles. Santa Clara’s share of Tesla–Midway Transmission Service is 81 MW. Santa Clara utilizes its share of the TANC Tesla–Midway Transmission Service to provide access to power supplies located in the southwest.

Geysers Transmission Project. Santa Clara has a 55 MW transmission share in PG&E’s 230 kV Castle Rock to Lakeville Transmission Line, which provides a link from the NCPA Geothermal Project to PG&E’s bulk transmission system. Through a long-term contract with the CDWR, sufficient additional transmission capability on the same line is available for the balance of Santa Clara’s share of the capacity and energy produced by the NCPA Geothermal Project. Santa Clara obtains additional transmission services to Santa Clara for its share of the output of NCPA Geothermal Project from arrangements with PG&E and the CAISO.

Interconnections and Distribution Facilities

Santa Clara’s service area is surrounded by a portion of PG&E’s service area and the two systems are interconnected at two City-owned 115 kV receiving stations – Northern Receiving Station (“NRS”) and Kifer Receiving Station (“KRS”), each located within the city limits. In addition, Santa Clara has a 230 kV interconnection with PG&E at PG&E’s Los Esteros Substation (“LES”) in the city of San Jose. Power received at LES is transmitted by Santa Clara approximately six miles to NRS. Santa Clara owns facilities for the distribution of electric power within its city limits (approximately 19.3 square miles), which includes approximately 27 miles of 60 kV power lines, approximately 500 miles of 12 kV distribution lines (approximately 64% of which are underground), and 27 stations. Santa Clara’s electric system experiences approximately 0.5 to 1.5 hours of outage time per customer per year. This compares favorably with other utilities in California with reliability factors ranging from 1.0 to 2.5 hours outage per customer per year.

Santa Clara owns a limited number of remote transmission assets, including, but not limited to, wires, poles, and other needed equipment to safely maintain and deliver power generated from generation assets located outside the City limits. Pursuant to the requirements of California Senate Bill 1028, the Santa Clara City Council made a wildfire risk determination at its October 9, 2018 City Council meeting and directed the electric utility to create a wildfire mitigation plan. The plan is to consolidate, formalize and enhance as required established preventive maintenance procedures and practices and be completed by January 1, 2020. Current practices include periodic inspection and maintenance, vegetation management and re-energization procedures in the event of a line trip. The plan will incorporate the new mitigation plan requirements that were signed into law on September 21, 2018, by California Senate Bill 901. See also “CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – Legislation Relating to Wildfires; Related Risks” in the front part of this Remarketing Memorandum.

Historically, PG&E provided interconnection, partial power and other support services to Santa Clara under an interconnection agreement. Beginning March 31, 1998, the operation of the transmission facilities owned by California’s investor-owned utilities, including PG&E, was undertaken by the CAISO. In July 2002, FERC approved a series of agreements between Santa Clara, PG&E, the CAISO and NCPA (which acts as scheduling coordinator for Santa Clara), including Santa Clara’s MSS Agreement with the

CAISO, to replace Santa Clara's interconnection agreement with PG&E and to allow Santa Clara to operate within the CAISO control area.

To the extent Santa Clara requires transmission/ancillary/power services beyond those contained in other remaining existing contracts or from Santa Clara's own generating resources, Santa Clara will procure such transmission/ancillary/power services from the CAISO or via the CAISO's markets.

Santa Clara is unable to predict how future industry changes, especially those concerning resource adequacy requirements, renewable fuels, greenhouse gas limitations and new transmission facilities to serve potential renewable energy projects, will affect future costs for the purchase of services under its interconnection, scheduling and CAISO agreements.

Renewable Energy and Energy Efficiency

A significant portion of the energy received by Santa Clara's electric customers is generated from renewable energy resources. Santa Clara's power mix in calendar year 2018 consisted of 39% eligible renewable resources. When large hydroelectric resources are included, Santa Clara's power mix consisted of 56% renewable and large hydroelectric power. On December 6, 2011, the Santa Clara City Council adopted revisions to Santa Clara's Environmental Stewardship and Renewable Portfolio Standard Policy Statement, and adopted a new RPS Enforcement Program, to conform to the standards and timetable set forth in California Senate Bill X1-2, signed by the Governor on April 12, 2011. Santa Clara satisfied the RPS target for Compliance Period 1 (from 2011 through 2013), with an average of approximately 20% of Santa Clara's energy portfolio supplied from renewable resources over such period, which has been verified and approved by the State of California. Santa Clara has also satisfied the RPS target for Compliance Period 2 (from 2014 through 2016), meeting the compliance requirement of 20% of retail sales in 2014 and 2015, and 25% of retail sales in 2016. In the first year of Compliance Period 3 (from 2017 through 2020), Santa Clara satisfied the RPS target, meeting the requirement of 29% of retail sales. Santa Clara expects to fulfill the RPS requirement under Compliance Period 3, procuring eligible renewable energy resources (not including "large hydro") amounting to 33% of total retail sales by 2020. California Senate Bill 350 will require that the amount of electricity generated each year from eligible renewable energy resources be increased to at least 50% of total retail sales by December 31, 2030. In addition, Santa Clara is prepared to meet the accelerated eligible renewable energy compliance requirement of 60% of retail sales by December 31, 2030 in accordance with California Senate Bill 100. See "CERTAIN FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – State Legislation and Regulatory Proceedings – *California Renewables Portfolio Standard*" in the front part of this Remarketing Memorandum.

Santa Clara's energy efficiency programs are separated into residential and business programs, with the majority of funding toward its largest customer segment - the business sector. Total Public Benefits Charge funds are about \$11 million per year. Residential programs include rate assistance for low-income customers, energy efficiency rebates (ceiling fans, clothes dryers, heat pumps, water heaters, attic insulation, and variable speed pool pumps), energy audits, and programs for schools and libraries. Business programs include energy audits, installation management for small companies, rebates for a wide variety of equipment (lighting, air conditioning systems, chillers, motors, new construction, food service equipment and customized installations, etc.), and design and construction assistance.

Wholesale Energy

For a number of years, Santa Clara has used its energy and transmission resources together with its power scheduling capabilities to buy and sell energy in the western North American market. As deregulation unfolded, a greater need to manage resources on a day-to-day basis evolved, resulting in a more comprehensive approach to trading operations at Santa Clara. The principal reason for wholesale trading is to optimize the value of the utility's assets and cost-effectively serve its retail load. For the Fiscal

Years ended June 30, 2017 and 2018, net trading revenues (wholesale power and fuel sales revenues less wholesale power and fuel purchase costs) were approximately \$1.0 million, and \$(0.4) million, respectively. The results in the Fiscal Year ended June 30, 2018 are primarily related to additional market purchases required by a longer than expected Donald Von Raesfeld Power Plant outage and termination of the Graphic Packaging and San Juan contracts, which resulted in 70 MW of resources being replaced at higher market prices. In addition, Santa Clara enters into additional long-term gas supply contracts to hedge its market exposure. Primarily owing to the unavailability of the Donald Von Raesfeld Power Plant during the outage, natural gas was sold to the market at below the long-term contract price. See also “– Fuel Supply.”

Risk Management

On December 5, 2006, the Santa Clara City Council approved an amended Risk Management Policy to provide policy guidance with respect to its wholesale power activities. Pursuant to the Policy, Santa Clara has established a Risk Oversight Committee (composed of the City Manager, the Director of Finance, the Chief Electric Utility Officer and the Santa Clara City Attorney) and a Risk Management Committee, to oversee all proposed power purchase agreements, whether for retail or wholesale purposes. Pursuant to the Policy, Santa Clara has also established regulations approved by the Risk Oversight Committee to govern the various functions of its trading operations. The Policy and Regulations are intended to: (a) provide a common risk management infrastructure to facilitate management control and reporting; (b) create a procedure to evaluate the creditworthiness of the counterparties, and to monitor and manage the aggregate credit exposure; (c) establish a corporate culture exemplifying best practices in risk management; (d) create a mechanism to identify market-related opportunities within Santa Clara’s overall exposure balance or “book” and opportunities to internalize related transactions; and (e) develop an effective, streamlined ability to timely commit to transactions. The Regulations establish guidelines for, among other things, acceptable counterparty creditworthiness standards and requirements for limits on credit exposure to any individual counterparty. Most of the purchase and sale transactions entered into by the power trading operation are for 92 days or less.

Rates and Charges

The Santa Clara City Council is authorized by the City Code of the City of Santa Clara to set charges, pay for and supply all electric energy and power to be furnished to customers according to such schedules, tariffs, rules and regulations as adopted by the City Council. The authority of Santa Clara to impose and collect rates and charges for electric power and energy is not presently subject to the regulatory jurisdiction of the California Public Utilities Commission (“CPUC”) or any other regulatory authority.

The following table summarizes a history of Santa Clara’s electric rate increases over the last five years.

**CITY OF SANTA CLARA
ELECTRIC UTILITY DEPARTMENT
HISTORY OF ELECTRIC RATE CHANGES**

<u>Date</u>	<u>Percent Change</u>
January 1, 2019	2.00%
January 1, 2018	0.00
January 1, 2017	3.00
January 1, 2016	2.00
January 1, 2015	5.00

Source: City of Santa Clara.

Santa Clara has a monthly billing system set up for all its electric accounts, including its largest customers under contract. Charges for electric service are typically included in a customer’s Municipal Utilities Regular Bill with other utility charges for the same time period. Bills are due and payable upon receipt of billing and generally become delinquent if not paid within 21 days thereafter. Late charges begin to accrue the day following the past due date. Electric service may be discontinued for nonpayment of any undisputed bill, following issuance by Santa Clara to the customer of a Shut-Off Notice Bill (typically the next bill sent to the customer following the past due bill) and a 48-Hour Notice of Service Discontinuance. Service will be restored only upon payment, in cash or certified funds, of all amounts then due and payable, including required deposits, utility service charges, and other related charges as permitted in the schedule of fees established and adopted by resolution of the Santa Clara City Council.

Major Customers

The ten largest customers of Santa Clara’s electric utility department, in terms of kWh sales for the Fiscal Year ended June 30, 2018, which are listed below, accounted for 53.0% of total kWh sales and 46.9% of revenues. The largest customer accounted for 7.7% of total kWh sales and 7.0% of total revenues, while the smallest customer of the largest ten customers accounted for 2.6% of total kWh sales and 2.4% of total revenues. Santa Clara is heavily dependent upon its industrial customers, which comprise approximately 90.4% of its load and 88.8% of its revenues (in the Fiscal Year ended June 30, 2018). For reference, Santa Clara’s industrial category includes all customers using more than 8,000 kWh per month. For many years, Santa Clara has been home to a number of the world’s best known “high tech” firms involved in the design and production of computers and software. In the past few years, some of these firms have shifted production away from Santa Clara; however, this shift has been more than offset by the development of numerous data centers established to serve the data needs of corporate offices and of internet-related businesses.

To help retain its industrial customers, and thus assure the stability of Santa Clara’s electric sales and revenue, Santa Clara has entered into multi-year electric service agreements with 14 of its larger customers, accounting for 64.9% of total kWh sales from industrial customers. All electric service agreements have a standard three-year term, with expirations ranging in 2019 through 2020. Santa Clara has developed flexible, standardized rate tariffs to replace these individually negotiated electric service agreements to facilitate transparency and efficiency. The new rate tariffs were approved by the Santa Clara City Council on November 27, 2018. The new rate tariffs are effective on January 1, 2019 and will take effect for customers as their existing electric service agreements expire. It is expected that the new standardized rate tariffs will result in similar rate impacts for customers who meet specific criteria.

**CITY OF SANTA CLARA
ELECTRIC UTILITY DEPARTMENT
MAJOR CUSTOMERS**

Customer	Business
Air Products	Industrial Gas and Chemicals
Coresite LLC	Data Centers
Cytera Data Centers Inc.	Data Centers
Digital Realty Trust	Data Centers
Intel Corp	Semiconductors
Microsoft Corporation	Data Centers
Oracle America Inc.	Database Software Products
Owens Corning Sales LLC	Manufacturing
Vantage Corp	Data Centers
Xeres Ventures LLC	Data Centers

Source: City of Santa Clara.

Customers, Energy Sales, Revenues and Demand

The average number of customers, kWh sales and revenues derived from sales, by classification of service, and peak demand during the past five Fiscal Years, are listed below.

CITY OF SANTA CLARA ELECTRIC UTILITY DEPARTMENT CUSTOMERS, SALES, REVENUES AND DEMAND (Fiscal Year Ended June 30)

	2014	2015	2016	2017	2018
Average Monthly Number of Customers:					
Residential	44,629	44,979	45,323	46,305	46,807
Commercial	6,191	6,253	6,277	6,231	6,156
Industrial.....	1,758	1,700	1,675	1,652	1,666
Other.....	561	563	566	549	569
Total.....	53,139	53,495	53,841	54,737	55,198
Kilowatt-hour Sales (000):					
Residential	233,847	224,647	232,581	228,505	229,957
Commercial	91,833	92,852	94,470	95,050	92,869
Industrial.....	2,651,757	2,754,035	3,000,038	3,133,903	3,236,317
Other.....	20,561	20,332	18,540	18,042	18,922
Total.....	2,997,998	3,091,866	3,345,629	3,475,500	3,578,065
Charges from Sale of Energy (000) ⁽¹⁾ :					
Residential	\$ 25,078	\$ 25,359	\$ 27,336	\$ 27,635	\$ 28,333
Commercial	13,771	14,609	15,407	15,868	15,678
Industrial.....	274,402	297,825	331,979	352,973	370,696
Other.....	2,435	2,520	2,449	2,448	2,565
Total ⁽²⁾	\$315,686	\$340,313	\$377,171	\$398,924	\$417,272
Peak Demand (MW).....	482.4	491.1	526.4	568.1	586.6

⁽¹⁾ Differs from Operating Revenues in Financial Operating Results and Balance Sheet information due to: (i) timing differences in accruals and billings; and (ii) exclusion of non-consumption based revenues.

⁽²⁾ Includes public benefits charge and grid management charge revenues.

Source: City of Santa Clara

Service Area

Population. The service area of the Santa Clara electric utility is coterminous with Santa Clara's boundaries. Santa Clara is located at the southern end of the San Francisco Bay. Encompassing a total area of approximately 19 square miles within northern Santa Clara County, Santa Clara is situated in the heart of "Silicon Valley." Shown below is certain population data for Santa Clara, the County of Santa Clara and the State of California.

POPULATION

	City of Santa Clara	County of Santa Clara	State of California
1970.....	86,118	1,065,313	19,971,069
1980.....	87,700	1,295,071	23,667,764
1990.....	93,613	1,497,577	29,760,021
2000.....	102,361	1,682,585	33,871,653
2010.....	116,468	1,781,642	37,253,956
2011.....	118,844	1,805,797	37,594,781
2012.....	120,121	1,832,983	37,971,427
2013.....	122,087	1,860,687	38,321,459
2014.....	122,475	1,882,230	38,622,301
2015.....	122,647	1,906,511	38,952,462
2016.....	124,807	1,925,306	39,214,803
2017.....	125,167	1,936,052	39,504,609
2018.....	128,789	1,947,798	39,740,508
2019.....	128,717	1,954,286	39,927,315

Source: 1970-2010, as of April 1, based on historical U.S. Census population data compiled by the California State Department of Finance. 2011-2019, as of January 1, State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, with 2010 Census Benchmark. Sacramento, California, May 2019.

Employment. The main businesses in Santa Clara are manufacturing and industrial. There are numerous companies that manufacture electronic components, communications equipment, computer systems, electronic games and similar products, and general items such as fiberglass, paper and chemicals. As shown in the following table, these firms are among the largest employers in Santa Clara as of June 30, 2018.

CITY OF SANTA CLARA TEN LARGEST EMPLOYERS

Employer	Business	Number of Employees
Applied Materials, Inc.	Nano Technology Mfg Services	8,500
Intel Corporation	Semiconductor Devices (Mfg.)	7,801
Advanced Micro Devices Inc.	Semiconductor Devices (Mfg.)	3,000
California's Great America	Amusement Park	2,500
Avaya Inc.	Software	2,000
Santa Clara University	Higher Education	2,000
City of Santa Clara	Local Government	1,904
Macy's	Retail	1,200
Catalyst Semiconductor Inc.	Semiconductor Devices (Mfg.)	1,100
Sra Osso Inc.	Information & Referral Services	1,001

Source: City of Santa Clara Comprehensive Annual Financial Report for Fiscal Year 2018.

Due to the nature of local industry, with its heavy emphasis on electronics, aerospace and research, Santa Clara has attracted many professional people and industrial workers possessing skills well above the average.

The San Jose Labor Market, as defined by the State Employment Development Department, includes all cities within Santa Clara County. According to the California Employment Development Department, the County of Santa Clara’s unemployment rate was 3.2% for the year 2017. The following table sets forth certain information regarding employment in the City of Santa Clara from 2013 through 2017.

**CITY OF SANTA CLARA
CIVILIAN LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT
2013 TO 2017⁽¹⁾**

	<u>2013⁽²⁾</u>	<u>2014⁽²⁾</u>	<u>2015⁽²⁾</u>	<u>2016⁽²⁾</u>	<u>2017⁽³⁾</u>
Civilian Labor Force	65,000	66,400	67,600	68,800	68,600
Employment	61,200	63,300	65,100	66,500	66,900
Unemployment	3,800	3,100	2,500	2,300	1,700
Unemployment Rate	5.8%	4.6%	3.7%	3.4%	2.5%

⁽¹⁾ Annual averages; not seasonally adjusted. Data may not add due to rounding. Unemployment rates calculated using unrounded data.

⁽²⁾ Reflects March 2016 benchmark.

⁽³⁾ Reflects March 2017 benchmark.

Source: State of California Employment Development Department, Labor Market Information Division, Monthly Labor Force Data for Cities and Census Designated Places, Annual Averages – Revised.

Transportation. Santa Clara is served by the Bayshore Freeway (U.S. Highway 101), which runs southeast from San Francisco to Los Angeles and is the major freeway connecting San Francisco and San Jose; Interstate 880, which runs north/south connecting San Jose and Oakland and becomes State Highway 17 (south of Interstate 280) and continues into Santa Cruz with access to Monterey; and Interstate 280, which runs north/south to San Francisco and State Highway 82. These freeways link Santa Clara to all parts of northern California.

Air transportation is available at both the San Francisco International Airport, approximately 40 miles to the north, and the San Jose International Airport, two miles from downtown Santa Clara. Rail service is provided by Union Pacific Railroad, on a north/south track linking San Jose and San Francisco, and CalTrain commuter service to Gilroy and San Francisco. The Guadalupe Corridor Light Rail has 20 completed miles of track from the Santa Clara Convention Center to the San Jose Convention Center, stretching to South San Jose, Mountain View and Milpitas.

The Santa Clara Valley Transportation Authority operates several lines within the City of Santa Clara with connections to major cities in the San Francisco Bay area. Interstate bus service is available via Greyhound Bus and Peerless. Most major trucking firms serve Santa Clara in addition to numerous local carriers.

Educational Facilities. The Santa Clara Unified School District provides public schooling from kindergarten through high school in most of the City of Santa Clara. Small geographical areas in the southern city limits are served by the Campbell Union Elementary School District and the Cupertino Union Elementary School District.

Santa Clara is also the home of the oldest institution of higher education in the West, Santa Clara University. Santa Clara residents are also in close proximity to San Jose State University, Stanford University and Mission College, as well as other units of the Community College System.

Capital Requirements

Santa Clara expects net capital requirements for the current and next four Fiscal Years (2018-19 through 2022-23) to total approximately \$206.4 million. Such improvements include distribution system improvements and replacements, including several new distribution substations and significant upgrades to its internal bulk distribution loops and distribution feeders. These distribution facilities are needed to meet increased capacity requirements of new and existing customers and are expected to be financed through a combination of load development fees, direct customer contributions, funds from Santa Clara's available cash reserves (described under "– Cash Reserves") and electric revenues. Santa Clara does not currently expect to issue new debt to finance its capital requirements.

Indebtedness

Santa Clara Electric Revenue Bonds. As of June 3, 2019, Santa Clara had outstanding senior lien electric revenue bonds ("Senior Electric Revenue Bonds") in the aggregate principal amount of \$151.245 million, payable from net revenues of the electric system. Such outstanding Senior Electric Revenue Bonds are comprised of \$54.830 million aggregate principal amount of Electric Revenue Refunding Bonds, Series 2011 A, \$47.615 million aggregate principal amount of Electric Revenue Refunding Bonds, Series 2013 A and \$48.800 million aggregate principal amount of Electric Revenue Refunding Bonds, Series 2018 A.

In addition to the outstanding Senior Electric Revenue Bonds, Santa Clara has entered into a loan agreement, dated as of June 16, 2014 (the "Loan Agreement"), with Banc of America Preferred Funding Corporation ("BofA") providing for a direct loan (the "Loan") from BofA to Santa Clara in an aggregate amount of approximately \$31.6 million, including \$1.1 million of capitalized interest. Santa Clara's obligation to make repayment of the Loan to BofA is evidenced by a subordinate electric revenue bond of Santa Clara (the "Subordinate Electric Revenue Bond"), payable from net revenues of the electric system on a basis junior and subordinate to the payment of Santa Clara's outstanding Senior Electric Revenue Bonds. Principal of the Loan is payable in annual installments, commencing on July 1, 2016 and ending on July 1, 2024. As of June 3, 2019, the remaining balance on the Loan Agreement is \$22.998 million. The occurrence of an event of default by Santa Clara under the Loan Agreement may result in an increase in the interest rate payable by Santa Clara with respect to the Subordinate Electric Revenue Bond and the Loan evidenced thereby and/or an acceleration in the payment of the principal amount of such Subordinate Electric Revenue Bond and the Loan evidenced thereby in accordance with the terms of the Loan Agreement.

For the Fiscal Year ending June 30, 2018, Santa Clara's annual debt service on the outstanding Senior Electric Revenue Bonds and the Subordinate Electric Revenue Bond totaled approximately \$18.1 million. Assuming no future debt issuances, the annual debt service on such outstanding Senior Electric Revenue Bonds and Subordinate Electric Revenue Bond is expected to increase to a high of \$19.856 million in Fiscal Year 2023-24, declining to a low of approximately \$12.745 million in Fiscal Year 2028-29.

Joint Powers Agency Obligations. As previously discussed, Santa Clara participates in several joint powers agencies, including TANC, NCPA, M-S-R PPA and M-S-R EA, which have issued indebtedness to finance the costs of certain projects on behalf of their respective project participants. Obligations of Santa Clara under its agreements with respect to TANC, NCPA and M-S-R PPA constitute operating expenses of Santa Clara's electric system payable prior to any of the payments required to be made on Santa Clara's Electric Revenue Bonds described above. Agreements with TANC, NCPA and M-S-R PPA are on a "take-or-pay" basis, which requires payments to be made whether or not projects are completed or operable, or whether output from such projects is suspended, interrupted or terminated. Certain of these agreements contain "step-up" provisions obligating Santa Clara to pay a share of the obligations of a defaulting participant. As described herein, Santa Clara also participates in M-S-R EA and has certain payment obligation in connection therewith which constitute operating expenses of Santa

Clara’s electric system. However, Santa Clara’s payment obligation to M-S-R EA is with respect to actual quantity of natural gas delivered each month on a take-and-pay (rather than take-or-pay) basis. Responsibility for bond repayment is non-recourse to Santa Clara. See “– Fuel Supply—*M-S-R Energy Authority–Gas Prepay*” above.

Santa Clara’s participation and share of debt service obligation (without giving effect to any “step-up” provisions) for the TANC, NCPA and M-S-R PPA projects in which it participates are shown in the following table.

**CITY OF SANTA CLARA
ELECTRIC UTILITY DEPARTMENT
OUTSTANDING DEBT OF JOINT POWERS AGENCIES
(as of June 3, 2019)
(Dollar Amounts in Millions)**

	Outstanding Debt⁽¹⁾	Santa Clara Participation⁽²⁾	Santa Clara Share of Outstanding Debt⁽¹⁾
M-S-R PPA			
San Juan Unit No. 4	\$ 98.9	35.00%	\$ 34.6
NCPA			
Geothermal Project	24.5	44.39	10.8
Calaveras Hydroelectric Project	278.4 ⁽³⁾	37.02 ⁽⁴⁾	105.5
Lodi Energy Center, Issue One	220.9	46.16	102.0
TANC			
COTP	191.8	10.00 ⁽⁵⁾	19.1
TOTAL⁽⁶⁾	\$814.5		\$272.0

- (1) Principal only. Does not include obligation for payment of interest on such debt. Excludes M-S-R EA as described above.
- (2) Participation based on actual debt service obligation. Participation obligation is subject to increase (in an amount up to a specified accumulated maximum above the original participation) upon default of another Participant.
- (3) Includes approximately \$85.2 million of hedged variable rate bonds.
- (4) Includes 1.16% additional share purchased from other NCPA participants. In addition, Santa Clara’s actual payments represent approximately 37.90% of outstanding debt service as a result of credit to non-participating members with respect to a portion of the debt obligation.
- (5) Excludes 10.4705% of Santa Clara’s original 20.4745% participation share for which, as described herein, Santa Clara has entered into an agreement to layoff to other TANC Member-Participants for a term of 25 years. Santa Clara remains contractually obligated for its full participation share. Santa Clara’s actual debt service obligation differs slightly from this percentage due to varying shares of certain series of TANC bonds relating to each TANC member-participant’s taxable portion and each TANC member-participant’s participation or non-participation in acquisition of assets from Vernon.
- (6) Columns may not add to totals due to independent rounding.

Source: City of Santa Clara Electric Utility Department.

For the Fiscal Year ended June 30, 2018, Santa Clara’s payment obligations under its agreements with the joint powers agencies aggregated approximately \$36.7 million. Santa Clara’s obligations to the joint powers agencies is expected to range between \$7.1 million and \$36.8 million through Fiscal Year 2039-40. This projection assumes that layoff agreements affecting expected obligations to be paid by Santa Clara remain effective for their full term and are performed by the parties thereto, that there are no future debt issuances, and that swap counterparties on interest rate hedges continue to perform (all of Santa Clara’s variable rate joint powers agency debt obligations are hedged). Santa Clara manages the total amount of variable rate debt exposure for its electric utility (including both direct and joint powers agency debt), and, by policy, has targeted up to approximately 25% as the appropriate variable rate exposure. Unreimbursed draws under liquidity arrangements supporting joint powers agency variable rate debt obligations bear interest at a maximum rate substantially in excess of the current interest rates on such variable rate debt

obligations. Moreover, in certain circumstances, the failure to reimburse draws on the liquidity agreements may result in the acceleration of scheduled payment of the principal of such variable rate joint powers agency obligations. In connection with the joint power agency variable rate debt obligations, the joint powers agency has entered into interest rate swap agreements (in an aggregate outstanding notional amount of approximately \$85.2 million) for the purposes of substantially fixing the interest cost with respect thereto. There is no guarantee that the floating rate payable to such joint powers agency pursuant to such interest rate swap agreements will match the variable interest rate on the associated variable rate joint powers agency debt obligations to which the respective interest rate swap agreement relates at all times or at any time. Under certain circumstances, the swap providers may be obligated to make payments to the joint powers agency under their respective interest rate swap agreement that is less than the interest due on the associated variable rate joint powers agency debt obligations to which such interest rate swap agreement relates. In such event, such insufficiency will be payable from the obligated joint powers agency members (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Santa Clara). In addition, under certain circumstances, each of the swap agreements is subject to early termination, in which event the joint powers agency could be obligated to make a termination payment to the applicable swap provider (a corresponding amount of which proportionate to its debt service obligations to such joint powers agency could be due from Santa Clara).

Transfers to the General Fund

The Santa Clara City Charter provides that up to 5% of gross revenues (not including revenues from wholesale transactions) from the electric utility is paid to the Santa Clara General Fund each year as a contribution in lieu of taxes. Pursuant to the Charter, such amounts are to be made from the Electric Utility Enterprise Fund after the payment of debt service on Santa Clara’s Electric Revenue Bonds.

The following table sets out the transfers from the electric utility to the Santa Clara General Fund for the last five Fiscal Years.

**CITY OF SANTA CLARA
ELECTRIC UTILITY DEPARTMENT
TRANSFERS TO THE GENERAL FUND
(Dollar Amounts in Thousands)**

Fiscal Year	Transfer Amount
2013-14	\$16,591
2014-15	17,493
2015-16	19,057
2016-17	21,117
2017-18	21,986

Source: City of Santa Clara.

Employees

General. As of January 1, 2019, Santa Clara had approximately 192 budgeted employees for its electric utility department. All of these Electric Utility department employees are represented either by the International Brotherhood of Electrical Workers (“IBEW”) or one of the other City employees’ associations, in matters pertaining to wages, benefits and working conditions. The labor agreements with IBEW and with the Engineers of the City of Santa Clara expired in December 2018, and new agreements are currently under negotiation. Until the successor agreements are executed, the terms of the expired agreements will continue to govern. The current labor agreements with the City of Santa Clara Employees Association (the primary bargaining units for employees of the electric utility department) and the

miscellaneous unclassified management employees will expire in December 2019. There have been no strikes or other union work stoppages at Santa Clara, including its electric utility department.

Pension Plans. Santa Clara’s permanent employees, including those in the electric utility department, are covered by the California Public Employees Retirement System (“CalPERS”), an agent multiple-employer defined benefit plan administered by CalPERS, which acts as a common investment and administrative agent for participating public employers within the State. CalPERS issues a separate comprehensive annual financial report. Copies of the CalPERS annual financial report may be obtained from the CalPERS Executive Office, 400 Q Street, Sacramento, California 95814.

Santa Clara’s defined benefit pension plans, the Miscellaneous Plan and Safety Plan, provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries for all Santa Clara employees. All permanent (full-time and part-time) and eligible “as-needed” hourly Santa Clara employees are required to participate in CalPERS. No employees assigned to the electric utility department participate in the Safety Plan.

The cost of the Miscellaneous Plan is funded through bi-weekly contributions from employees and from employer contributions by Santa Clara. The member employees’ contribution rates are set by State statute and only change with significant contract amendments. The member contribution can be paid by the employee or by Santa Clara on the employee’s behalf in accordance with applicable labor agreements. In accordance with applicable state law, the contribution rate for all public employers is determined annually by the actuary and is effective on the July 1 following notice of a change in rate. Funding contribution amounts are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Santa Clara is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members, using the actuarial basis recommended by CalPERS actuaries and actuarial consultants and adopted by the CalPERS Board of Administration. The employer contribution rates are established, and may be amended, by CalPERS.

The electric utility department is allocated its portion of Santa Clara’s required contributions for the Miscellaneous Plan. This allocation is based on eligible employee wages.

The table below sets forth the electric utility department’s allocated share of Santa Clara’s required contributions to the Miscellaneous Plan for the four Fiscal Years 2014-15 through 2017-18 and the amount budgeted for its allocated share of Santa Clara’s estimated required contributions to such plans for Fiscal Year 2018-19.

Fiscal Year Ended June 30	Miscellaneous Plan		
	Electric Utility Department Allocated Share	Total City Required Contribution Amount	Contributions as a % of Covered Payroll
2015	\$5,335,643	\$15,257,771	26.68%
2016	6,484,674	18,543,534	29.94
2017	7,558,410	21,613,984	30.32
2018	8,832,102	25,256,224	33.45
2019 ⁽¹⁾	9,633,675	33,779,638	N/A

⁽¹⁾ Fiscal Year 2018-19 figures are budgeted numbers.

Source: City of Santa Clara.

Santa Clara's required contributions to CalPERS fluctuate each year and include a normal cost component and a component equal to an amortized amount of the unfunded liability. Many assumptions are used to estimate the ultimate liability of pensions and the contributions that will be required to meet those obligations, and these assumptions and contribution requirement are subject to changes implemented by CalPERS Board of Administration. On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50% to 7.00% using a three year phase-in beginning with the June 30, 2016 actual valuations, and beginning with Fiscal Year 2017-18 CalPERS changed the employer contributions toward the plan's unfunded liability as dollar amounts instead of prior method of a contribution rate. The CalPERS Board of Administration may in the future further adjust certain assumptions used in the CalPERS actuarial valuations, which adjustments may increase Santa Clara's required contributions to CalPERS in future years. Accordingly, Santa Clara cannot provide any assurances that Santa Clara's required contributions to CalPERS in future years will not significantly increase (or otherwise vary) from any past or current projected levels of contributions.

Effective for Fiscal Year 2014-15, Santa Clara adopted Governmental Accounting Standards Board ("GASB") Statement No. 68 ("GASB No. 68"), affecting the reporting of pension liabilities for accounting purposes. Under GASB No. 68, Santa Clara is required to report the Net Pension Liability (*i.e.*, the difference between the Total Pension Liability and the Pension Plan's Net Position or market value of assets) in its financial statements.

The table below summarizes certain information relating to the electric utility department's proportionate share of the Net Pension Liability of Santa Clara's Miscellaneous Plan for the measurement periods ended June 30, 2014 through June 30, 2017 (as reported in Santa Clara's audited financial statements as of the succeeding fiscal year). The electric utility department's proportion of the Net Pension Liability was based on a projection of the electric utility department's long-term share of contributions to the Miscellaneous Plan relative to the projected contributions of all funds of Santa Clara.

**City of Santa Clara Electric Utility Department
Proportionate Share of the Net Pension Liability – Miscellaneous Plan**

Measurement Date⁽¹⁾ (June 30)	Proportionate Share of the Net Pension Liability⁽²⁾	Electric Utility Enterprise Fund Share of the Net Pension Liability⁽²⁾	Share of Net Position as a % of Share of Total Pension Liability	Share of Net Pension Liability as a % of Its Covered Payroll
2014	34.97%	\$69,068,338	67.42%	345.33%
2015	34.97	74,516,387	65.57	371.64
2016	34.97	84,615,916	62.18	394.81
2017	34.97	92,735,319	62.02	411.60

⁽¹⁾ Measured using prior fiscal year annual actuarial valuation rolled forward to measurement date using standard update procedures.

⁽²⁾ Reflects the electric utility department's share of City's Miscellaneous Plan Net Pension Liability of \$197,507,400, \$213,086,611, \$241,967,166 and \$265,185,350 as of June 30, 2014, June 30, 2015, June 30, 2016 and June 30, 2017 measurement date, respectively.

Source: City of Santa Clara.

As of the June 30, 2017 measurement date, the city-wide Total Pension Liability for the Miscellaneous Plan was \$698,221,756 and the Plan Fiduciary Net Position was \$433,036,406, resulting in a city-wide Miscellaneous Plan Net Pension Liability of \$265,185,350. In the June 30, 2016 actuarial valuation utilized for measuring the pension liability as of the June 30, 2017 measurement date, the Entry Age Normal Actuarial Cost Method was used. The actuarial valuation assumptions used for determining pension liabilities included (a) a 7.15% investment rate of return (net of pension plan investment and administrative expense); (b) projected salary increases that vary based on age and type of service; (c) an inflation component of 2.75% per year; (d) payroll growth of 3.0%; and (e) a discount rate of 7.15%.

Public Agencies Post-Employment Benefits Trust Program. In Fiscal Year 2016-17, the Santa Clara City Council approved a resolution creating the Public Agencies Post-Employment Benefits Trust Program (the “Program”) to allow Santa Clara to pre-fund its pension obligation. The Program was established within the meaning of Section 115 of the Internal Revenue Code, as amended, and the Regulations issued thereunder, and is a tax-exempt trust under the relevant statutory provisions of the State. The Program provides Santa Clara with an alternative to depositing additional funds with CalPERS and provides for greater Santa Clara control over assets and portfolio management, while allowing Santa Clara to set aside additional funds towards future CalPERS costs. The Program is administered by Public Agency Retirement Services (“PARS”). As of June 30, 2018, the market value of Santa Clara’s contributions to the Program was \$15,612,916, including the electric utility department’s portion of \$3,488,543.

Retiree Health Benefits. Santa Clara’s single-employer defined benefit Other Post Employment Benefit (“OPEB”) Plan Trust Fund, which was established by the Santa Clara City Council in Fiscal Year 2007-08 in accordance with GAAP, provides reimbursements to retirees for qualified healthcare expenses. Employees, including those assigned to the electric utility department, who have retired from Santa Clara with at least ten years of service and meet certain criterion based upon retirement date, household income in the most recent calendar year and age are entitled to reimbursements for qualified expenses. Annual maximum reimbursement amounts differ depending on when an employee retired from Santa Clara service. In Fiscal Year 2007-08, Santa Clara established an irrevocable exclusive agent multiple-employer defined benefit trust which is administered by Public Agency Retirement Services (PARS). The trust is used to accumulate and invest assets necessary to reimburse retirees.

The OPEB Plan trust annual contributions are based on actuarial valuations. The contribution requirements are established and may be amended by the Santa Clara City Council.

For Fiscal Years prior to Fiscal Year 2017-18, Santa Clara’s reported annual OPEB cost (expense) was calculated based upon the annual required contribution (“ARC”), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents the level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over 30 years. The actuarial assumptions used include a 5.25% discount rate.

The table below sets forth certain information regarding Santa Clara’s annual OPEB cost and the approximate portion of such amount funded by the electric utility department, the percentage of annual OPEB cost contributed and Santa Clara’s Net OPEB obligation for the three Fiscal Years 2014-15 through 2016-17.

City of Santa Clara OPEB Plan				
Fiscal Year Ended June 30	Annual OPEB Cost	Amount Funded by Electric Utility Enterprise Fund	% of Annual OPEB Cost Contributed	Net OPEB Obligation
2015	\$2,769,000	\$458,640	100%	--
2016	2,887,000	499,992	100	--
2017	2,981,000	545,871	100	--

Source: City of Santa Clara.

Effective for Fiscal Year 2017-18, Santa Clara follows the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (“GASB No. 75”) affecting the reporting of OPEB liabilities for accounting purposes. GASB No. 75 replaces the requirements of GASB Statement No. 45. GASB No. 75 establishes standards for employers with other postemployment liabilities for recognizing and measuring net OPEB liabilities, along with deferred inflows and outflows of

resources, and expenses/expenditures related to the other postemployment liability. GASB No. 75 does not establish requirements for funding.

The table below sets forth certain information regarding the electric utility department's allocated share of Santa Clara's annual contributions to the OPEB Plan trust for the Fiscal Year ended June 30, 2018, including the relation of such contributions to the actuarially determined contribution amount for such fiscal year. The amount budgeted for the electric utility department's share of OPEB Plan contributions for Fiscal Year 2018-19 is \$907,215.

**City of Santa Clara OPEB Plan
(For the Fiscal Year ended June 30, 2018)**

Contribution Funded by Electric Utility Enterprise Fund	Actuarially Determined Contribution Amount by Electric Utility Enterprise Fund	Electric Utility Contribution Deficiency (Excess) to Actuarially Determined Contribution
\$2,203,000 ⁽¹⁾	\$1,911,000	\$(292,000)
Total City Contribution	Total City Actuarially Determined Contribution Amount	Total City Contribution Deficiency (Excess) to Actuarially Determined Contribution
\$6,300,000	\$5,466,000	\$(834,000)

⁽¹⁾ For the fiscal year ending June 30, 2018, SVP cash contribution was \$1,882,000 in payment to the trust and the estimated implied subsidy was \$321,000, resulting in total payment of \$2,203,000.

Source: City of Santa Clara.

Pursuant to GASB No. 75, for the Fiscal Year ended June 30, 2018, Santa Clara reported a net OPEB liability of \$16,285,879 for the Electric Utility Enterprise Fund's proportionate share (34.97%) of the City of Santa Clara's net OPEB liability of \$46,571,000 (reflecting a total OPEB liability of \$65,516,000 and a fiduciary net position of \$18,945,000 for the OPEB Plan). The OPEB Plan Net Position as a percentage of Santa Clara's total OPEB liability was 28.902%. The net OPEB liability as a percentage of covered-employee payroll was 34.4%. The net OPEB liability was measured as of June 30, 2018 and the total OPEB liability used to calculate the net OPEB liability was determined by a June 30, 2016 actuarial valuation, rolled forward to June 30, 2018 using standard actuarial methods, based on actuarial methods and assumptions. In the June 30, 2016 actuarial valuation, the actuarial assumptions used in determining the total OPEB liability include (a) a 5.25% discount rate and investment rate of return; (b) aggregate projected salary increases of 3.0% annually; (c) an inflation component of 3.0% per year; and (d) a healthcare cost trend of 6.5% for 2018, scaling down to 5.0% for year 2021 for non-medicare participants, and 6.7% for 2018, scaling down to 5.0% for year 2021 for medicare participants.

Additional information regarding the City of Santa Clara's retirement plans and other post-employment benefits can be found in the City of Santa Clara comprehensive annual financial report for the Fiscal Year ended June 30, 2018, which may be obtained at <http://santaclaraca.gov>.

Cash Reserves

Santa Clara maintains cash reserves for a number of reasons, including operating cash requirements, construction cash requirements, dealing with the cost impacts of dry hydroelectric conditions, gas and electric market volatility, and allowing Santa Clara the flexibility to increase rates on a scheduled basis. Santa Clara established a Cost Reduction Fund to manage the cost impacts of dry year hydroelectric

conditions and gas and electric market volatility, as well as the scheduling of rate increases. As of December 31, 2010, the balance of the Cost Reduction Fund was transferred to the Rate Stabilization Fund (as a subaccount therein) described below.

Santa Clara has maintained a Rate Stabilization Fund (the “Rate Stabilization Fund”). Amounts in the Rate Stabilization Fund are available to pay costs of the electric utility subject to certain terms and conditions. As of June 30, 2018, approximately \$120.7 million was on deposit in the Rate Stabilization Fund, including approximately \$95.7 million on deposit in the Cost Reduction Account therein. In addition, as of June 30, 2018, Santa Clara had unrestricted operating cash reserves of approximately \$94.1 million and \$98.8 million of cash reserves designated for construction purposes and approximately \$5.1 million for Donald Von Raesfeld Power Plant fuel reserves (not including \$3.5 million of cash reserves designated for pension liability and subsequently deposited at Public Agency Retirement Services). Thus, as of June 30, 2018, Santa Clara’s electric system had restricted and unrestricted cash reserves totaling approximately \$318.7 million.

Collectively, these reserves are designed to help insulate Santa Clara from market volatility. In addition, the indenture under which Santa Clara’s Senior Electric Revenue Bonds were issued permits the use of certain unrestricted cash balances and reserves to satisfy Santa Clara’s rate covenants with its bond holders. During the past five fiscal years, Santa Clara has made transfers related to operating expenses from the Rate Stabilization Fund for each of Fiscal Years 2013-14 and 2014-15 in the amounts set forth below. For Fiscal Years 2015-16 and 2016-17, Santa Clara made deposits into the Rate Stabilization Fund in the amounts of \$2.7 million and \$34.0 million, respectively, as set forth below. No Rate Stabilization Fund transfers or deposits were made for Fiscal Year 2017-18.

Fiscal Year	Transfer from Rate Stabilization Fund to Adjusted Net Revenues	Deposit to Rate Stabilization Fund
2013-14	\$10,000,000	--
2014-15	8,000,000	--
2015-16	--	\$ 2,700,000
2016-17	--	34,000,000
2017-18	--	--

Santa Clara has determined that it is appropriate to use a portion of its unrestricted cash balances and reserves to stabilize or subsidize its electric rates in the near term and to increase rates when appropriate. Santa Clara maintains a minimum target balance of \$120 million for the Rate Stabilization Fund. In order to maintain this minimum target balance, Santa Clara adopted a 7% electric rate increase effective in January 2010, a 7% electric rate increase effective in January 2011, a 5% electric rate increase effective in January 2014, a 5% electric rate increase effective in January 2015, and a 2% electric rate increase effective in January 2016. As of June 30, 2017, the Rate Stabilization Fund balance was restored to meet its minimum target balance level. See “– Condensed Operating Results and Selected Balance Sheet Information” and “– Rates and Charges” herein.

Insurance

The insurable property and facilities of the electric utility are covered under Santa Clara’s general insurance policies. Santa Clara maintains property damage coverage through the Alliant Property Insurance Program (“APIP”), which has a plan limit of \$1 billion. Santa Clara maintains boiler and machinery property coverage for its power plants through APIP of \$100 million per occurrence, with a \$2,500 deductible per occurrence, with certain exceptions. Santa Clara does not carry earthquake insurance on the property and facilities of the electric utility except for a dedicated earthquake coverage of up to \$20 million for the Grizzly Power Plant. Santa Clara maintains a dedicated flood limit shared by the power plants with

limits of \$27.5 million and \$7.5 million for locations in Flood Zones A & V. Santa Clara is self-insured for up to \$3 million for general liability claims. Inclusive of the self-insurance, Santa Clara has \$25 million in liability coverage with CSAC Excess Insurance Authority. In addition, Santa Clara is also self-insured up to \$500,000 per claim for workers' compensation claims with excess coverage up to the State of California statutory limit with employer's liability coverage of \$5 million per claim (inclusive of Santa Clara's retention) through CSAC Excess Insurance Authority. All self-insurance programs are administered jointly by Santa Clara personnel and outside contractors.

Litigation

General. There is no action, suit or proceeding known to be pending or threatened, restraining or enjoining Santa Clara in the execution or delivery of, or in any way contesting or affecting the validity of any proceedings of Santa Clara taken with respect to Third Phase Agreement. At any given time, Santa Clara is party to or affected by various claims, disputes and litigation, including proceedings before FERC and other matters, that arise in the course of the electric system's activities and operations.

Present lawsuits and other claims against Santa Clara's electric utility are incidental to the ordinary course of operations of the electric utility and are covered by Santa Clara's liability coverage, including its self-insurance program. In the opinion of Santa Clara's management and, with respect to such litigation, the Santa Clara City Attorney, such claims and litigation will not have a materially adverse effect upon Santa Clara's ability to make payments under Third Phase Agreement.

Other Matters. In addition, from time-to-time, there are ongoing proceedings that involve projects in which Santa Clara has an interest and which comprise a portion of the current resource portfolio of Santa Clara's electric system. Although Santa Clara is generally not a party to such litigation, the outcome of such proceedings may impact the costs and operations of the affected project. Santa Clara is not aware of any such presently ongoing proceedings that, if determined adversely, would be expected to materially adversely affect the financial position or operations of its electric utility.

Condensed Operating Results and Selected Balance Sheet Information

The following table sets forth net income and selected balance sheet information of Santa Clara's electric utility for the five Fiscal Years ended June 30, 2018. The information for the Fiscal Years ended June 30, 2014 through June 30, 2018 was prepared by Santa Clara on the basis of its audited financial statements for such years.

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**CITY OF SANTA CLARA
ELECTRIC UTILITY DEPARTMENT
SUMMARY OF FINANCIAL OPERATING RESULTS⁽¹⁾
(\$ in 000s)**

	2014	2015	2016	2017	2018
Summary of Income					
Operating Revenues ⁽²⁾	\$309,169	\$332,938	\$371,801	\$390,409	\$403,698
Operating Expenses:					
Salaries, Wages and Benefits	23,654	26,712	26,461	32,016	38,633
Materials, Supplies and Services ⁽³⁾	276,335	283,861	301,991	299,531	328,517
Depreciation	19,727	20,163	19,956	19,820	20,143
Total Operating Expenses	<u>\$319,716</u>	<u>\$330,736</u>	<u>\$348,408</u>	<u>\$351,367</u>	<u>\$387,293</u>
Operating Income (Loss)	(10,547)	2,202	23,393	39,042	16,405
Other Income ⁽⁴⁾	24,629	21,535	21,883	23,083	26,999
Interest Expense	(8,605)	(9,094)	(8,819)	(8,697)	(8,103)
Wholesale Resources Sales	28,622	27,301	17,279	36,162	34,994
Wholesale Resources Purchases	(28,871)	(32,635)	(21,682)	(35,197)	(35,413)
Other Expenses	(5,556)	(4,766)	(7,183)	(6,808)	(5,809)
Gain (Loss) on Retirement of Fixed Assets	--	62	(10)	4,830	--
Renewable Energy Credit	5,449	2,129	3,879	6,237	3,499
Equity (Loss) in Joint Power Agencies ⁽⁵⁾	4,215	(4,719)	737	4,345	7,828
Net Income Before Operating Transfers and Extraordinary Items	<u>\$ 9,336</u>	<u>\$ 2,015</u>	<u>\$ 29,477</u>	<u>\$ 62,997</u>	<u>\$ 40,400</u>
Selected Balance Sheet Information					
(as of June 30)					
Rate Stabilization Fund ⁽⁶⁾	\$ 92,259	\$ 84,259	\$ 86,959	\$120,959	\$120,709
Cash Designated for Construction	89,922	79,988	65,593	74,613	98,821
Cash Designated for Pension Liability	--	--	--	3,500	--
Operating Cash	<u>73,154</u>	<u>74,446</u>	<u>73,865</u>	<u>83,325</u>	<u>99,237</u>
Total Pooled & Cash Investments	<u>\$255,335</u>	<u>\$238,693</u>	<u>\$226,417</u>	<u>\$282,397</u>	<u>\$318,767</u>

(1) Columns may not add to totals due to rounding.

(2) See “– Rates and Charges” above. Excludes public benefit charge revenues.

(3) Includes purchased power payments and payments to joint power agencies. Also includes payment of a portion of gross revenues to Santa Clara’s General Fund as contribution in lieu of taxes which payment is subordinate to the payment of other operating expenses and debt service. Per the Santa Clara City Charter, up to 5% of gross revenues (not including revenues from wholesale transactions) from the electric utility is paid to Santa Clara’s General Fund each year.

(4) Primarily represents interest income, public benefit charge revenues, grants, rents, and other non-recurring miscellaneous income. Unrealized gains were included in Fiscal Year 2013-14 (\$1.914 million), 2014-15 (\$0.421 million), and 2015-16 (\$0.907 million). Unrealized losses were included in Fiscal Years 2016-17 (\$2.723 million) and 2017-18 (\$2.635 million).

(5) Net loss in Fiscal Year 2014-15 reflects equity share loss of \$4.067 million in NCPA and \$0.652 million in TANC.

(6) Includes Cost Reduction Account. As of December 31, 2010, the Cost Reduction Fund was transferred to the Rate Stabilization Fund (as a subaccount therein).

Source: City of Santa Clara.

Rate Covenant Compliance Under Electric Revenue Bond Indenture

The electric revenue bond indenture pursuant to which Santa Clara's Senior Electric Revenue Bonds are issued requires Santa Clara to produce electric utility revenues in each year such that Adjusted Net Revenues (as defined in the electric revenue bond indenture) will be sufficient to pay debt service on all Senior Electric Revenue Bonds and parity debt for such Fiscal Year. The electric revenue bond indenture permits amounts in the Rate Stabilization Fund to be used to satisfy the rate covenant. Santa Clara has elected to use such unrestricted funds for such purpose as described in "– Cash Reserves" above.

Santa Clara has satisfied its rate covenant in each year as shown below. In addition to operating expenses and debt service, the electric utility has other obligations which it is required to satisfy. Such obligations include payments in lieu of taxes as well as capital expenditures not otherwise financed with bond proceeds, which obligations are, in accordance with the Santa Clara City Charter, payable subordinate to the payment of debt service on the Electric Revenue Bonds and parity debt. Capital expenditures not financed with bond proceeds are funded from a variety of sources, including reserves, developer contributions and electric system revenues. See "– Cash Reserves." The debt service coverage ratios shown below differ from those previously reported for Fiscal Years 2013-14 through 2016-17 to reflect a correction made to adjusted operating expenses to eliminate the double-counting of certain non-capitalized previously budgeted expenditures.

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CITY OF SANTA CLARA
RATE COVENANT COMPLIANCE UNDER
ELECTRIC REVENUE BOND INDENTURE⁽¹⁾
(\$ in 000s)

	Fiscal Year Ending June 30,				
	2014	2015	2016	2017	2018
Debt Service Coverage:					
Adjusted Revenues ⁽²⁾	\$306,183	\$332,178	\$359,084	\$353,328	\$383,662
Adjusted Operating Expenses ⁽³⁾	287,661	296,390	312,786	315,340	346,825
Adjusted Net Revenue Available for Debt Service	\$ 18,522	\$ 35,788	\$ 46,298	\$ 37,988	\$ 36,837
Debt Service on Senior Electric Revenue Bonds ⁽⁴⁾	\$ 12,183	\$ 14,934	\$ 15,334	\$ 15,612	\$ 14,204
Debt Service on Subordinate Electric Revenue Bond	--	--	2,515	798	4,108
Total Debt Service ⁽⁵⁾	\$ 12,183	\$ 14,934	\$ 17,850	\$ 16,410	\$ 18,312
Adjusted Revenues in Excess of Debt Service Requirements	\$ 6,339	\$ 20,855	\$ 28,448	\$ 21,578	\$ 18,524
Debt Service Coverage Ratio - Senior Electric Revenue Bonds	1.52	2.40	3.02	2.43	2.59
Debt Service Coverage Ratio – Senior and Subordinate Bonds	1.52	2.40	2.59	2.31	2.01

(1) Numbers may not add due to rounding. The debt service coverage ratios shown above differ from those previously reported for Fiscal Years 2013-14 through 2016-17 to reflect a correction made to Adjusted Operating Expenses to eliminate the double-counting of certain non-capitalized previously budgeted expenditures.

(2) Adjusted Revenue includes operating revenues and non-operating revenues, other income (excluding unrealized gains or losses and developer contributions), net wholesale transactions and renewable energy credits, and excludes any gain on retirement of fixed assets or equity in joint powers agency projects accounted for on the equity method of accounting. Fiscal Year 2012-13 adjusted revenue was recalculated in 2014 to include renewable energy credit. Also includes Rate Stabilization Fund transfers related to operating expenses. In Fiscal Years 2012-13, 2013-14 and 2014-15, transfers from the Rate Stabilization Fund were included in Adjusted Revenues, in the amounts of \$7.43 million, \$10.0 million and \$8.0 million, respectively. In Fiscal Years 2015-16 and 2016-17, deposits were made into the Rate Stabilization Fund in the amounts of \$2.7 million and \$34.0 million, respectively. See “– Rates and Charges” and “– Cash Reserves.”

(3) Adjusted Operating Expenses include operating expenses (including joint powers agency obligation payments) and other expenses, less depreciation and amortization expense and contribution-in-lieu to the General Fund. Adjusted Operating Expenses do not include any loss on retirement of fixed assets or any loss on joint powers agency projects accounted for on an equity method of accounting basis.

(4) Includes net swap payments and letter of credit fees relating to variable rate electric revenue bonds (which variable rate electric revenue bonds were redeemed in December 2018).

(5) Excludes joint powers agency obligations, the costs of which are a component of adjusted operating expenses. See footnote (3).

Source: City of Santa Clara.

APPENDIX B

NCPA AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED JUNE 30, 2018 AND JUNE 30, 2017

The combined financial statements of Northern California Power Agency and Associated Power Corporations as of and for the years ended June 30, 2018 and 2017 have been audited by Baker Tilly Virchow Krause, LLP, independent auditors, as stated in their report. Baker Tilly Virchow Krause, LLP has not been engaged to perform and has not performed, since the date of its report included therein, any procedures on the financial statements addressed in such report. Baker Tilly Virchow Krause, LLP has also not performed any procedures relating to this Remarketing Memorandum.

APPENDIX C

BOOK-ENTRY ONLY SYSTEM

The information in this Appendix C regarding DTC and its book-entry system has been obtained from DTC's website, for use in securities offering documents, and NCPA takes no responsibility for the accuracy or completeness thereof or for the absence of material changes in such information after the date hereof.

The Depository Trust Company, New York, New York ("DTC") acts as securities depository for the 2008 Bonds. The 2008 Bonds were issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered certificate for each maturity of the 2008 Bonds, in the aggregate principal amount of such maturity, has been deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a S&P Global Ratings' rating of AA+. The DTC Rules applicable to Direct and Indirect Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com. The information on this website is not incorporated herein by reference.

Purchases of 2008 Bonds under the DTC book-entry system must be made by or through Direct Participants, which will receive a credit for the 2008 Bonds on DTC's records. The ownership interest of each actual purchaser of each 2008 Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2008 Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the 2008 Bonds, except in the event that use of the book-entry system for the 2008 Bonds is discontinued.

To facilitate subsequent transfers, all 2008 Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be

requested by an authorized representative of DTC. The deposit of the 2008 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2008 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2008 Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the 2008 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2008 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the 2008 Bond documents. For example, Beneficial Owners of the 2008 Bonds may wish to ascertain that the nominee holding the 2008 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the 2008 Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2008 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to NCPA as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2008 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal of, premium, if any, and interest on, and Tender Price of, the 2008 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from NCPA or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Direct or Indirect Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, or NCPA, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal of, premium, if any, and interest on, or Tender Price of, the 2008 Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of NCPA or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its 2008 Bonds purchased or tendered, if applicable, through its Direct Participant, to the Tender Agent, and shall effect delivery of such 2008 Bonds by causing the Direct Participant to transfer the Direct Participant's interest in the 2008 Bonds, on DTC's records, to the Tender Agent. The requirement for physical delivery of 2008 Bonds in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the 2008 Bonds are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered 2008 Bonds to the Tender Agent's DTC account.

DTC may discontinue providing its services as securities depository with respect to the 2008 Bonds at any time by giving notice to the Trustee and NCPA. Under such circumstances, in the event that a successor depository is not obtained, 2008 Bond certificates are required to be printed and delivered.

NCPA may decide to discontinue use of the system of book-entry only transfers for the 2008 Bonds through DTC (or a successor securities depository). In that event, 2008 Bond certificates will be printed and delivered as provided in the Indenture.

APPENDIX D

SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

The following is a summary of certain provisions of the Indenture. This summary is not to be considered a full statement of the terms of the Indenture and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not defined in this summary or elsewhere in the Official Statement have the respective meanings set forth in the Indenture.

Certain Definitions

“Act” means the provisions relating to the joint exercise of powers found in Chapter 5 of Division 7 of Title 1 of the Government Code of California, as amended and supplemented and shall also include the provisions of any other law applicable to NCPA by virtue of being a public entity pursuant to said Chapter 5 of Division 7 of Title 1 including, without limitation, Article 10 and Articles 11 of Chapter 3 of Division 2 of Title 5 of said Government Code, as each thereof may be amended and supplemented.

“Additional Bonds” means all Bonds, whether issued in one or more Series, authenticated and delivered on original issuance pursuant to Section 203 of the Original Indenture and any Bonds thereafter authenticated and delivered in lieu of or in substitution for such Bonds.

“Adjustable Rate Bond” means, as of any date of determination, any Bond not bearing interest from such date to the maturity thereof at a specified, fixed rate; provided, however, that each Adjustable Rate Bond shall also be an Option Bond with a Purchase Date on the Business Day next succeeding the termination of each Adjustment Period for such Bond.

“Adjusted Aggregate Debt Service” means, as of any date of calculation and with respect to any period, the sum of the amounts of Adjusted Debt Service during such period for all Series of Bonds, other than Lender Bonds; provided, however, that in computing such Adjusted Aggregate Debt Service, each Series of Adjustable Rate Bonds shall be deemed to bear the Assumed Interest Rate applicable thereto.

“Adjusted Debt Service” means, with respect to any Series of Bonds, as of any date of calculation and with respect to any period, the Debt Service for such Series of Bonds for such period which would result if the Principal Installment for such Series due on the final maturity date of such Series were adjusted over the period specified pursuant to the next sentence so that the Bonds of such Series would have Substantially Equal Debt Service for each Fiscal Year of such period and that such Principal Installment would be fully paid at the end of such period, assuming timely payment of all principal or Redemption Price, if any, of and interest on the Bonds of such Series in accordance with such adjustments and computing the interest component of Debt Service on the basis of the true interest cost actually incurred on such Series of Bonds (determined by the true, actuarial method of calculation which consists of calculating true interest cost from the actual delivery date of such Series of Bonds as opposed to calculating it from the date of such Series of Bonds). Such adjustment shall be made over a period which shall begin with the final maturity date of such Series and end on such date or a date which shall be specified in the Supplemental Indenture authorizing such Series of Bonds, which date shall be not later than the earlier to occur of (i) 40 years after the date of such Bonds or (ii) the termination date of the Third Phase Agreement. For purposes of computing such true interest cost for any Series of Bonds containing Adjustable Rate Bonds each such Adjustable Rate Bond shall be deemed to bear the Assumed Interest Rate applicable thereto.

“Agreement of Attornment” means the Agreement of Attornment, dated March 22, 1985, by and among NCPA, the Calaveras County Water District and Sierra Constructors, as the same may be amended and supplemented from time to time in accordance with its terms and terms of the Indenture.

“Bond” or “Bonds” means any bond or bonds authenticated and delivered under and pursuant to the Indenture.

“Business Day” means any day of the year on which banks in New York, New York are not required or authorized to remain closed and on which the Trustee, the Paying Agent and the New York Stock Exchange are open.

“Capital Improvements” means all renewals or replacements of or repairs, additions, improvements, modifications or betterments chargeable to the capital account of the Project, which are (i) consistent with Prudent Utility Practice and determined necessary by the Commission to keep the Project in good operating condition or to prevent a loss of revenue therefrom, (ii) required by any governmental agency having jurisdiction over the Project, or (iii) required by the Indenture; provided, however, that Capital Improvements shall not include any additional generating units in addition to the number of generating units presently included in the Project.

“Construction Contract” means the Agreement for Turnkey Construction of North Fork Stanislaus River Hydroelectric Development Project, dated as of March 15, 1985, by and between CCWD and Sierra Constructors, relating to the Project.

“Debt Service” means for any period and with respect to any Series, an amount equal to the sum of (i) interest accruing during such period on Bonds of such Series, except to the extent that such interest is to be paid from deposits into the Debt Service Account in the Debt Service Fund made from Bond proceeds or the investment earnings thereon and (ii) that portion of each Principal Installment for such Series which would accrue during such period if such Principal Installment were deemed to accrue daily in equal amounts from the next preceding Principal Installment due date for such Series (or, if there shall be no such preceding Principal Installment due date, from a date one year preceding the due date of such Principal Installment or from the date of issuance of the Bonds of such Series, whichever date is later). Such interest and Principal Installments for such Series shall be calculated on the assumption that (i) no Bonds (except for Option Bonds actually tendered for purchase prior to the stated maturity date thereof) or such Series Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment of each Principal Installment on the due date thereof and (ii) the purchase price of Option Bonds tendered for purchase before the stated maturity thereof shall be deemed to accrue on the date such Option Bonds are required to be purchased to such tender.

“Debt Service Reserve Requirement” means, as of any date of calculation, and with respect to the Debt Service Reserve Account (which does not secure the 2019 Bonds), an amount equal to the greatest amount of Adjusted Aggregate Debt Service for the Participating Bonds for the then current or any future Fiscal Year and, with respect to a Series Debt Service Reserve Account, the amount, if any, specified as such with respect to such Series Debt Service Reserve Account pursuant to the Indenture.

“Escrow Bonds” means any Option Bond purchased on the tender of the Holder thereof and held by or on behalf of NCPA.

“Future Bonds” means all Bonds issued after the Eleventh Supplemental Indenture of Trust became effective, *i.e.*, July 1, 1998.

“Initial Facilities” means those facilities included in or required by the FERC License and all associated facilities, rights, land and interest in land, properties, studies, reports, equipment, transmission facilities and improvements appurtenant thereto and necessary or convenient therewith including without limitation any payments to other parties such as contributions in and of construction in connection with the transmission of the output of the facilities included in the definition of the “Project” under the Power Purchase Contract.

“Interest Payment Date” means, with respect to each Series of Bonds, the dates during each year on which interest on such Series of Bonds is scheduled to be paid as specified in, or determined in accordance with, the Indenture or Supplemental Indenture authorizing such Series of Bonds.

“Investment Securities” means and includes any of the following securities, if and to the extent the same are at the time legal for investment of NCPA’s funds:

- (i) Direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America, including obligations issued or held in book entry form on the books of the Department of the Treasury of the United States and including a receipt, certificate or any other evidence of an ownership interest in the aforementioned obligations, or in specified portions thereof (which may consist of specified portions of interest thereon) and also including advance refunded tax-exempt bonds secured by the aforementioned obligations;

(ii) Bonds, debentures, notes, participation certificates or other evidences of indebtedness issued, or the principal of and interest on which are unconditionally guaranteed, by the Bank for Cooperatives, the Federal Intermediate Credit Bank, the Federal Home Loan Bank System, the Export-Import Bank of the United States, the Government National Mortgage Association, the Federal National Mortgage Association, the United States Postal Service or any other agency or instrumentality of or corporation wholly owned by the United States of America;

(iii) New Housing Authority Bonds or Project Notes issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions to be paid by the United States of America or any agency thereof;

(iv) Direct and general obligations, to the payment of which the full faith and credit of the issuer is pledged, of any State of the United States or any political subdivision thereof which at the time of investment is rated by any nationally recognized bond rating agency and assigned by such agency a rating which denotes a security with investment characteristics at least equal to the investment characteristics of a security presently rated by Moody's Investors Service, Inc. or Standard & Poor's Corporation as "A" or better;

(v) Bank time deposits evidenced by certificates of deposit, and banker's acceptances, issued by any bank, trust company or national banking association insured by the Federal Deposit Insurance Corporation; provided either that the aggregate of such bank time deposits and bankers' acceptances issued by any bank, trust company or banking association does not exceed at any one time ten per centum (10%) of the aggregate of the capital stock, surplus and undivided profits of such bank, trust company or banking association and that such capital stock, surplus and undivided profits shall not be less than Twenty-Five Million Dollars (\$25,000,000), or that such deposits are fully and continuously secured by a valid and perfected security interest in obligations described in paragraph (i), (ii) or (iii) of this definition; and

(vi) Repurchase agreements with any bank, trust company or national banking association insured by the Federal Deposit Insurance Corporation, or with any government bond dealer recognized as a primary dealer by the Federal Reserve Bank of New York, which agreements are fully and continuously secured by a valid and perfected security interest in obligations described in paragraph (i), (ii) or (iii) of this definition.

"Lender Bonds" means any Bonds which: (i) are issued pursuant to the requirements of a lending or credit facility or agreement and (ii) will be held by a bank, trust company or similar financial institution, domestic or foreign.

"NCPA Operating Expenses" means (i) costs incurred by NCPA pursuant to the Third Phase Agreement, (ii) any other current expenses or obligations required to be paid by NCPA under the provisions of the Project Agreements or by law, all to the extent properly allocable to the Project, or required to be incurred under or in connection with the performance of the Third Phase Agreement, (iii) the fees and expenses of the Fiduciaries, (iv) fees incurred pursuant to any lending or credit facility or agreement, including, without limitation, the Reimbursement Agreements, and (v) all other costs (including overhead) properly allocable to the Project. NCPA Operating Expenses shall not include any costs or expenses for new construction or any allowance for depreciation of the Project.

"NCPA Revenues" means (i) all revenues, income, rents and receipts derived or to be derived by NCPA from or attributable to the Project or the Power Purchase Contract or to the payment of the costs of the Project received or to be received by NCPA under the Third Phase Agreement or the Power Purchase Contract or under any other contract for the sale by NCPA of the Project or any part thereof or any contractual arrangement with respect to the use of the Project or any portion thereof or the services or capacity thereof, (ii) the proceeds of any insurance, including the proceeds of any self-insurance fund, covering business interruption loss relating to the Project, (iii) any receipts under the Construction Contract or the Agreement of Attornment, other than insurance proceeds required to be deposited in the Construction Fund in accordance with the provisions of the Indenture, and (iv) interest received or to be received on any moneys or securities (other than in the Construction Fund) held pursuant to the Indenture and required to be paid into the Revenue Fund.

“Option Bonds” means Bonds which by their terms may be tendered by and at the option of the Holder thereof for mandatory purchase by or on behalf of NCPA prior to the stated maturity date thereof, or the maturities of which may be extended by and at the option of the Holder thereof.

“Outstanding” when used with reference to Bonds, means, as of any date, Bonds theretofore or thereupon being authenticated and delivered under the Indenture except: (i) Lender Bonds, unless as of such date the principal amount of such Lender Bonds is greater than zero; (ii) Escrow Bonds, which shall not be Outstanding for purposes of payment but shall be Outstanding for all other purposes of the Indenture; (iii) Bonds cancelled by the Trustee at or prior to such date; (iv) Bonds paid or deemed to be paid pursuant to the provisions for defeasance under the Indenture; and (v) Bonds in lieu of or in substitution for which other Bonds shall have been authenticated and delivered pursuant to the Indenture.

“Participating Bonds” means all Bonds Outstanding prior to the Eleventh Supplemental Indenture of Trust becoming effective (July 1, 1998) and all Future Bonds other than Future Bonds which are specified in the Supplemental Indenture authorizing such Future Bonds not to be Participating Bonds in accordance with the provisions of the Indenture.

“Power Purchase Contract” means the Revised Power Purchase Contract, dated as of March 1, 1985, by and between NCPA and CCWD as the same may be amended and supplemented from time to time in accordance with its terms and the terms of the Indenture.

“Project” means the Initial Facilities and all Capital Improvements.

“Project Agreements” means, prior to the respective termination dates thereof, the Indenture, the Third Phase Agreement, the Power Purchase Contract, the Construction Contract, the Agreement of Attornment and any other contract designated a Project Agreement by the Commission of NCPA.

“Prudent Utility Practice” means any of the practices, methods and acts, which, in the exercise of reasonable judgment in the light of the facts (including but not limited to the practices, methods and acts engaged in or approved by a significant portion of the electrical utility industry prior thereto) known at the time the decision was made, would have been expected to accomplish the desired result at the lowest reasonable cost consistent with good business practices, reliability, safety and expedition, taking into account the fact that Prudent Utility Practice is not intended to be limited to the optimum practice, methods or act to the exclusion of all others, but rather to be a spectrum of possible practices, methods or acts which could have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety and expedition. Prudent Utility Practice includes due regard for manufacturers’ warranties and requirements of governmental agencies of competent jurisdiction and shall apply not only to functional parts of the Project, but also to appropriate structures, landscaping, paving, signs, lighting, other facilities and public relations programs reasonably designed to promote public enjoyment, understanding and acceptance of the Project.

“Securities Depository” means, with respect to the 2019 Bonds, the securities depository designated in the Supplemental Indenture with respect to such Series and its successors and assigns or if (a) the then incumbent Securities Depository resigns from its functions as depository for such 2019 Bonds, or (b) NCPA discontinues use of the then incumbent Securities Depository for such 2019 Bonds pursuant to such Supplemental Indenture, any other securities depository which agrees to follow the procedures required to be followed by a securities depository for such 2019 Bonds.

“Series” when used with reference to the Bonds, means all of the Bonds authenticated and delivered on original issuance and identified pursuant to the Indenture or the Supplemental Indenture authorizing such Bonds as a separate Series of Bonds, and any Bonds thereafter authenticated and delivered in lieu of or in substitution for such Bond pursuant to the Indenture, regardless of variations in maturity, interest rate, Sinking Fund Installments, or other provisions.

“Series Debt Service Reserve Account” means each Account within the Debt Service Fund established with respect to a Series of Future Bonds which are not Participating Bonds pursuant to the Indenture.

“Sinking Fund Installment” means an amount so designated which is established pursuant to the Supplemental Indenture with respect to such Series.

“Subordinated Indebtedness” means any bond, note or other evidence of indebtedness which is expressly made subordinate and junior in right of payment to the Bonds and which complies with the applicable provisions of the Indenture. Any such Subordinated Indebtedness shall not, except as otherwise specifically provided in the Indenture, be nor be deemed to be Bonds for purposes of the Indenture.

“Substantially Equal Adjusted Aggregate Debt Service” means, with respect to any period of similar Fiscal Years for all Outstanding Bonds, other than Lender Bonds, that the greatest Adjusted Aggregate Debt Service for any Fiscal Year in such period is not in excess of one hundred and twenty-five percent of the Adjusted Aggregate Debt Service for any preceding Fiscal Year in such period.

“Substantially Equal Debt Service” means, with respect to any period of Fiscal Years for any Series of Bonds, other than Lender Bonds, that the greatest Debt Service for such Bonds for any Fiscal Year in such period is not in excess of one hundred and twenty-five percent of the smallest Debt Service for such Bonds for any Fiscal Year in such period.

“Supplemental Indenture” means any indenture supplemental to or amendatory of the Indenture, entered into by NCPA and the Trustee in accordance with the Indenture.

“Trust Estate” means (A) subject only to the provisions of the Indenture permitting the application thereof for the purposes and on the terms and conditions set forth in the Indenture, (i) the proceeds of the sale of the Bonds, other than Lender Bonds, (ii) the NCPA Revenues and (iii) all amounts on deposit in the Funds established by the Indenture, including the investments, if any, thereof, to the extent held by the Trustee; (B) all right, title and interest of NCPA in, to and under the Third Phase Agreement; (C) all right, title and interest of NCPA in, to and under the Power Purchase Contract; and (D) all right, title and interest of NCPA in, to and under the Construction Contract and the Agreement of Attornment.

Pledge Effected by the Indenture

NCPA has pledged and assigned the Trust Estate to the Trustee for the benefit of the Bondholders.

Nature of Obligation

The Indenture provides that the principal, Redemption Price, if any, and Purchase Price thereof, and interest on the Bonds shall be payable solely from the NCPA Revenues and other funds pledged by NCPA under the Indenture and shall not constitute a charge against the general credit of NCPA. Neither the faith and credit nor the taxing power of the State of California or any public agency thereof or any member of NCPA or any Project Participant is pledged to the payment of the principal, Redemption Price, if any, and Purchase Price of, or interest on the Bonds. NCPA has no taxing power. The Bonds do not constitute a debt, liability or obligation of the State of California or any public agency (other than NCPA) or any member of NCPA or any Project Participant. Neither the members of the Commission of NCPA nor any officer or employee of NCPA shall be individually liable for the Bonds or in respect of any undertakings by NCPA under the Indenture.

Application of NCPA Revenues

NCPA Revenues are pledged by the Indenture to payment of the principal, Redemption Price, if any, and Purchase Price of, and interest on the Bonds, subject to the provisions of the Indenture permitting application for other purposes. The Indenture establishes the following Funds and Accounts for the application of Bond proceeds and NCPA Revenues:

FUNDS	HELD BY
Revenue Fund	NCPA
Operating Reserve Fund.....	Trustee
Operating Fund	NCPA
Debt Service Fund*	Trustee
Debt Service Account	
Debt Service Reserve Account	
Subordinated Indebtedness Fund	Trustee
Note Fund	Trustee
Reserve and Contingency Fund	NCPA
Renewal and Replacement Account	
Reserve Account	
General Reserve Fund.....	NCPA
Rate Stabilization Account	
General Account	

* If provided in a Supplemental Indenture authorizing a Series of Future Bonds which are not Participating Bonds, the Debt Service Fund shall include a Series Debt Service Reserve Account for each such Series of Future Bonds as to which a debt service reserve is to be established.

All NCPA Revenues received are to be deposited promptly in the Revenue Fund upon receipt thereof. Amounts in the Revenue Fund are to be paid monthly in the following order of priority for application therefrom as follows:

(1) To the Operating Reserve Fund, the amount, if any, required so that the balance in said Fund shall equal \$100,000 or such greater or lesser amount as shall be recommended by the Consulting Engineer to be on deposit in said Fund.

(2) To the Operating Fund, a sum which, together with any amount in the Operating Fund not set aside as a general reserve for NCPA Operating Expenses or as a reserve for working capital, is equal to the total moneys appropriated for NCPA Operating Expenses in the Annual Budget for the then current month. In addition, if the Supplemental Indenture authorizing a Series of Bonds so provides, amounts from the proceeds of such Bonds may be deposited in the Operating Fund and set aside as a reserve for working capital. Amounts in the Operating Fund shall be paid out from time to time by NCPA for reasonable and necessary NCPA Operating Expenses. The Indenture provides for the application of excess amounts in the Operating Fund to make up any deficiencies in certain other funds established under the Indenture with any balance to be deposited in the General Account of the General Reserve Fund.

(3) To the Debt Service Fund (i) for credit to the General Debt Service Subaccount, the amount, if any, required so that the balance in said subaccount, plus the amounts on deposit in all the other subaccounts in the Debt Service Account to the extent available to pay Accrued Aggregate Debt Service, as of the last day of the then current month, shall equal the Accrued Aggregate Debt Service as of the last day of the then current month; (ii) for credit to the Debt Service Reserve Account, the amount, if any, required for such Account to equal the Debt Service Reserve Requirement for the Debt Service Reserve Account as of the last day of the then current month; and (iii) for credit to each Series Debt Service Reserve Account established for Future Bonds, the amount, if any, required for each such Account to equal the applicable Debt Service Reserve Requirement for such Series Debt Service Reserve Account as of the last day of the then current month; provided that the transfers to the Debt Service Reserve Account and each Series Debt Service Reserve Account shall be made to the Debt Service Reserve Account and each Series Debt Service Reserve Account without preference or priority between such transfers made in accordance with clauses (ii) and (iii) of this subsection (a), and in the event of any insufficiency of such moneys ratably based on the amount required to be deposited in each such Account, without any discrimination or preference. The Trustee will apply amounts in the General Debt Service Subaccount in the Debt Service Account to the payment of principal of and interest on the Bonds. In addition, the Trustee may, and if directed by NCPA must, apply certain amounts in the Debt Service Account to the purchase or redemption of Bonds to satisfy sinking fund requirements prior to the due date of any Sinking Fund Installment. The Trustee must pay out

of the Debt Service Account the amount required for the redemption of Bonds called for redemption pursuant to sinking fund requirements on any redemption date.

Amounts in the Debt Service Reserve Account are to be applied on the last business day of each month to make up any deficiency in the Debt Service Account with respect to Participating Bonds. Whenever the amount in the Debt Service Reserve Account, together with the amount in the Debt Service Account with respect to Participating Bonds, is sufficient to pay in full all Outstanding Participating Bonds in accordance with their terms, the funds on deposit in the Debt Service Reserve Account will be transferred to the Debt Service Account. So long as the amount in the Debt Service Fund available for such purpose is sufficient to pay all then Outstanding Participating Bonds in full (including principal or applicable sinking fund Redemption Price and interest thereon), no deposits shall be required to be made in the Debt Service Reserve Account. Whenever moneys on deposit in the Debt Service Reserve Account exceed the Debt Service Reserve Requirement with respect to such Account, the excess will be deposited in the Revenue Fund.

In the event of the refunding of Participating Bonds, the Trustee shall, upon the direction of NCPA with the advice of Bond Counsel, withdraw from the Debt Service Reserve Account any and all of the amounts on deposit therein and hold such amounts for the payment of the principal or Redemption Price, if applicable, and interest on such Participating Bonds; provided that such withdrawal shall not be made unless (a) immediately thereafter the Participating Bonds being refunded shall be deemed to have been paid pursuant to the Indenture, and (b) the amount remaining in the Debt Service Reserve Account after such withdrawal shall not be less than the Debt Service Reserve Requirement for the Debt Service Reserve Account.

Amounts in each Series Debt Service Reserve Account are to be applied on the last business day of each month to make up any deficiency in the Debt Service Account with respect to the Future Bonds secured by such Series Debt Service Reserve Account. Whenever the amount in a Series Debt Service Reserve Account, together with the amount in the Debt Service Account with respect to the Future Bonds secured by such Series Debt Service Reserve Account, is sufficient to pay in full all Future Bonds secured by such Series Debt Service Reserve Account then Outstanding in accordance with their terms, the funds on deposit in such Series Debt Service Reserve Account will be transferred to the Debt Service Account and applied to the payment or redemption of the Series of Future Bonds secured by such Series Debt Service Reserve Account. So long as the amount in the Debt Service Fund with respect to a Series of Future Bonds secured by a Series Debt Service Reserve Account is sufficient to pay all such Future Bonds then Outstanding in full (including principal or applicable sinking fund Redemption Price and interest thereon), no deposits shall be required to be made in such Series Debt Service Reserve Account. Whenever moneys on deposit in a Series Debt Service Reserve Account exceed the Debt Service Reserve Requirement with respect to such Account, the excess will be deposited in the Revenue Fund.

In the event of the refunding of Future Bonds secured by a Series Debt Service Reserve Account, the Trustee shall, upon the direction of NCPA with the advice of Bond Counsel, withdraw from the Series Debt Service Reserve Account securing such Future Bonds any and all of the amounts on deposit therein and hold such amounts for the payment of the principal or Redemption Price, if applicable, and interest on such Future Bonds; provided that such withdrawal shall not be made unless immediately thereafter the Future Bonds being refunded shall be deemed to have been paid pursuant to the Indenture.

(4) To the Subordinated Indebtedness Fund, the amount, if any, required so that the balance in said Fund shall equal all principal and interest on outstanding Subordinated Indebtedness accrued and unpaid and to accrue to the end of the then current calendar month. The Trustee will apply amounts in the Subordinated Indebtedness Fund to the payment of interest and reserves on Subordinated Indebtedness in accordance with the provisions of the resolution, agreement or contract relating to the issuance of such Subordinated Indebtedness. However, if at any time the amounts in the Debt Service Fund are less than the amounts required by the Indenture, and there is not on deposit in the General Reserve Fund or in the Reserve and Contingency Fund or in the Note Fund available moneys sufficient to cure such deficiency, the Trustee will transfer from the Subordinated Indebtedness Fund the amount necessary to make up such deficiency.

(5) To the Note Fund, the amount, if any, required so that the balance in said Fund shall equal all interest on outstanding Notes accrued and unpaid and to accrue to the end of the then current calendar month. The Trustee will apply amounts in the Note Fund to the payment of interest on Notes in accordance with the provisions of the resolution, agreement or contract relating to the issuance of such Notes. However, if at any time the amounts in the Debt Service Fund are less than the amounts required by the Indenture, and there is not on deposit in the General Reserve Fund or in the Reserve and Contingency Fund available moneys sufficient to cure such deficiency, the Trustee will transfer from the Note Fund the amount necessary to make up such deficiency.

(6) To the Reserve and Contingency Fund, for credit to (a) the Renewal and Replacement Account, the amount, if any, provided for deposit therein during the then current month in the current Annual Budget; and (b) the Reserve Account, the amount, if any, required so that the balance in said Account shall equal \$3,000,000 or such greater or lesser amount as shall be recommended by the Consulting Engineer to be on deposit in said Account.

Amounts in the Renewal and Replacement Account will be applied to the cost of Capital Improvements. To the extent not provided for in the then current Annual Budget or by reserves in the Operating Fund or from the proceeds of Bonds, amounts in the Reserve Account will be applied to the costs of Capital Improvements to the extent amounts in the Renewal and Replacement Account are not sufficient therefor, and to the payment of extraordinary operating and maintenance costs of the Project and contingencies.

If at any time the amounts in the Debt Service Fund are less than the amounts required by the Indenture, and there are not on deposit in the General Reserve Fund available moneys sufficient to cure such deficiency, then the Trustee will transfer from the Reserve Account and the Renewal and Replacement Account, in that order, the amount necessary to make up such deficiency.

Amounts in the Renewal and Replacement Account or the Reserve Account not required to meet any deficiencies in the Debt Service Fund or for any of the purposes for which such Accounts were established shall be transferred to the Operating Fund to the extent, if any, deemed necessary by NCPA, to make up any deficiencies therein. Any remaining excess shall be deposited into the General Account of the General Reserve Fund.

(7) To the Rate Stabilization Account of the General Reserve Fund, the amount, if any, provided for deposit therein during the then current month in the Annual Budget and, to the General Account of the General Reserve Fund, the balance, if any, in the Revenue Fund. NCPA must transfer from the General Reserve Fund: (a) to the Debt Service Fund amounts necessary to make up any deficiencies in required payments to the Debt Service Fund; and (b) to the Renewal and Replacement Account and the Reserve Account in the Reserve and Contingency Fund the amount necessary to make up any deficiencies in payments to said Accounts.

Amounts in the General Reserve Fund not required to meet any of the deficiencies described above will, upon determination of NCPA, be applied to or set aside for any one or more of the following: (a) transfer to the Revenue Fund; (b) the purchase or redemption of any Bonds, and expenses and reserves in connection therewith; (c) NCPA Operating Expenses or reserves therefor; (d) payments into any separate account or accounts established in the Construction Fund; (e) Capital Improvements or reserves therefor; (f) payment of principal of and interest on Subordinated Indebtedness or purchase or redemption of Subordinated Indebtedness; (g) payment of principal of and interest on Notes; and (h) any other lawful purpose of NCPA related to the Project. Bonds purchased or redeemed with amounts in the General Reserve Fund may be credited to Sinking Fund Installments thereafter to become due (other than the next due).

Deposits from the Revenue Fund into the Debt Service Fund, the Subordinated Indebtedness Fund, the Note Fund, the Reserve and Contingency Fund and the General Reserve Fund are to be made as soon as practicable in each month after the deposit of NCPA Revenues into the Revenue Fund, the Operating Reserve Fund and the Operating Fund have been made for such month, but not later than the last business day of such month.

Certain Requirements of and Conditions to Issuance of Bonds

Bonds shall be authenticated by the Trustee pursuant to the Indenture upon compliance with certain requirements and conditions, including the following:

- (a) The Trustee shall have received an Opinion of Bond Counsel to the effect that the Bonds of the Series being issued have been duly and validly authorized, issued and are valid and binding obligations of NCPA and as to certain other matters concerning the Indenture.
- (b) The Trustee shall have received the amount, if any, necessary for deposit: (A) in the Debt Service Reserve Account so that the amount in such Account shall equal the Debt Service Reserve Requirement with respect to such Account calculated immediately after the authentication and delivery of each Series of Participating Bonds and (B) in the Series Debt Service Reserve Account, if any, established with respect to each Series of Future Bonds, so that the amount in such Account shall equal the Debt Service Reserve Requirement, if any, with respect to such Account calculated immediately after the authentication and delivery of such Series of Future Bonds;
- (c) Except in the case of Lender Bonds and Refunding Bonds, NCPA shall have certified that it is not in default in the performance of its agreements under the Indenture. In the case of Refunding Bonds such certificate may state that upon the application of the proceeds of the Refunding Bonds, NCPA will not be in default in the performance of its agreements under the Indenture.

The Indenture also provides that Principal Installments will be established at the time of issuance for each Series of Bonds so as to comply with the following:

- (a) Principal Installments shall commence not later than the later of (A) the first day of the eighth Fiscal Year following the end of the Fiscal Year of authentication and delivery of such Series of Bonds or (B) the first day of the fifth Fiscal Year following the end of the Fiscal Year in which NCPA estimates that the Project will reach its Date of Firm Operation, and shall terminate not later than the date on which the Third Phase Agreement terminates.
- (b) Such Principal Installments shall result in either (A) Substantially Equal Debt Service for the Bonds of such Series for the Fiscal Year immediately preceding the due date of the first such Principal Installment to occur subsequent to the Date of Firm Operation of the Project and for each Fiscal Year thereafter to and including the final maturity date of such Series or (B) Substantially Equal Adjusted Aggregate Debt Service for all Outstanding Bonds, including such Series being issued, for the first Fiscal Year in which Principal Installments become due on all Series of Bonds then Outstanding, including such Series being issued, beginning however no earlier than the Fiscal Year immediately preceding the due date of the first Principal Installment to occur subsequent to the Date of Firm Operation of the Project, and for each Fiscal Year thereafter to and including the Fiscal Year immediately preceding the latest maturity of any Series of Bonds Outstanding immediately prior to the issuance of such Series being issued or the Fiscal Year immediately preceding the latest maturity of such Series being issued, whichever is earlier (using in the case of any Series of Bonds sold by competitive bidding a net effective interest rate for the Bonds of such Series as estimated by NCPA); provided that, if the first Principal Installment of any Series of Bonds shall be less than 12 months after the date of issuance thereof, it shall be assumed, for purposes of this calculation, that interest accrued on such Series for the entire 12-month period preceding the first Principal Installment at the same rate as interest accrued for the actual portion of such period during which such Series of Bond was Outstanding.

Additional Bonds

NCPA may issue one or more series of Additional Bonds for the purpose of paying all or a portion of the Cost of Acquisition and Construction of the Project including paying the principal of and interest on any Subordinated Indebtedness or Notes issued for the purpose of paying all or a portion of the Cost of Acquisition and Construction of the Project upon compliance with the conditions to issuance described above.

Refunding Bonds

One or more Series of Refunding Bonds may be issued to refund any Outstanding Bonds of one or more Series or one or more maturities within a Series. Refunding Bonds shall be authenticated and delivered by the Trustee pursuant to the Indenture upon compliance with certain requirements and conditions, including the receipt by the Trustee of either (i) moneys sufficient to pay the applicable Redemption Price of the refunded Bonds to be redeemed plus the amount required to pay principal of refunded Bonds not to be redeemed together with accrued interest on such Bonds to the redemption date or maturity date, as the case may be, or (ii) Investment Securities in such amounts and having such terms as required by the Indenture to pay the principal or Redemption Price, if applicable, and interest due on and before the redemption date or maturity date, as the case may be.

Debt Service Reserves for Future Bonds

Each Series of Future Bonds shall constitute Participating Bonds unless the Supplemental Indenture authorizing such Series of Future Bonds provides that such Series of Future Bonds shall not be Participating Bonds and, if such Series of Future Bonds is to be secured by a Series Debt Service Reserve Account, provides for the establishment of such Series Debt Service Reserve Account and establishes the Debt Service Reserve Requirement for such Account; provided, however, that each Series of Future Bonds shall constitute Participating Bonds unless at or prior to the issuance of such Series of Future Bonds the Trustee shall have received written confirmation from each rating agency then rating the Outstanding Bonds that the issuance of such Series of Future Bonds as other than Participating Bonds, in and of itself, will not result in the withdrawal or reduction in the rating of any Bonds, other than such Series of Future Bonds, to be Outstanding upon the issuance of such Series of Future Bonds.

Notice of Redemption

The Trustee shall give notice of the redemption of any Bonds to be redeemed, which notice shall specify the redemption date and the place or places where amounts due upon redemption will be payable, and, if less than all of the Bonds of any like Series and maturity are to be redeemed, the letters and numbers or other distinguishing marks of such Bonds so to be redeemed, and, in the case of Bonds to be redeemed in part only, such notice shall also specify the respective portions of the principal amount thereof to be redeemed. Such notice shall further state that on such date there shall become due and payable upon each Bond to be redeemed the Redemption Price thereof, or the Redemption Price of the specified portions of the principal thereof in the case of Bonds to be redeemed in part only, together with interest accrued to the redemption date, and that from and after such date interest thereon shall cease to accrue and be payable.

With respect to the redemption of any Bonds, the Trustee will mail a copy of such notice, not less than thirty (30) days before the redemption date, to the registered owners of any Bonds or portions of Bonds which are to be redeemed, at their last addresses, if any, appearing upon the registry books.

Receipt of such notice shall not be a condition precedent to such redemption of the Bonds and failure to receive any such notice shall not affect the validity of the proceedings for the redemption of Bonds. Upon the request of NCPA, the Trustee shall also give notice of redemption to certain securities depositories and bond services as specified in the Indenture.

Interchangeability and Transfer

Bonds, other than Lender Bonds, upon surrender thereof at the principal corporate trust office of the Bond Registrar with a written instrument of transfer satisfactory to the Bond Registrar, duly executed by the Holder or his duly authorized attorney, may be exchanged for an equal aggregate principal amount of Bonds of the same maturity and of other authorized denominations.

Except for Option Bonds deemed tendered but not actually tendered, Bonds shall be transferable only upon the books of NCPA, which shall be kept for such purposes at the principal corporate trust office of the Bond Registrar, by the Holder thereof in person or by his attorney duly authorized in writing, upon surrender thereof together with a written instrument of transfer satisfactory to the Bond Register duly executed by the Holder or his duly authorized attorney. Upon the transfer of any such Bond, other than a Lender Bond, NCPA shall issue in the

name of the transferee a new Bond or Bonds of the same aggregate principal amount and Series and maturity as the surrendered Bond.

In all cases in which the privilege of exchanging Bonds or transferring Bonds is exercised, NCPA shall execute and the Trustee shall authenticate and deliver Bonds in accordance with the provisions of the Indenture. For every such exchange or transfer of Bonds, NCPA or the Bond Registrar may make a charge sufficient to reimburse it for any tax, fee or other governmental charge required to be paid with respect to such exchange or transfer.

Investment of Certain Funds and Accounts

The Indenture provides that certain Funds and Accounts held thereunder may, and in the case of the Debt Service Account and the Debt Service Reserve Account in the Debt Service Fund, the Subordinated Indebtedness Fund, and the Note Fund, subject to the terms of agreements relating to the issuance of the Subordinated Indebtedness and Notes, must, be invested to the fullest extent practicable in Investment Securities; provided that certain of such Funds and Accounts can only be invested in certain types of Investment Securities. The Indenture provides that such investments will mature no later than such times as necessary to provide moneys when reasonably expected to be needed for payments from such Funds and Accounts and provides specific limitations on the terms of investments for moneys in certain Funds and Accounts.

Prior to the completion of the Initial Facilities, interest and investment earnings (net of which (a) represents a return of accrued interest paid in connection with the purchase of any investment or (b) is required to effect the amortization of any premium paid in connection with the purchase of any investment) earned on any moneys or investments in such Funds and Accounts will be paid into the Construction Fund and after such date all such interest shall be paid into the Revenue Fund; except that to the extent provided in the Supplemental Indenture authorizing a Series of Additional Bonds to pay the Cost of Acquisition and Construction of Capital Improvements, all such interest earned on any moneys or investments in the account established in the Construction Fund for such Capital Improvements shall be retained in said account.

The Trustee may deposit moneys in all Funds and Accounts held by it under the Indenture in banks or trust companies organized under the laws of any state of the United States or national banking associations (“Depositaries”). All moneys held under the Indenture by the Trustee or any Depositary must be (1) either (a) continuously and fully insured by the Federal Deposit Insurance Corporation, or (b) continuously and fully secured by lodging with the Trustee or any Federal Reserve Bank, as custodian, as collateral security, such securities as are described in clauses (i) through (iv), inclusive, of the definition of “Investment Security” having a market value (exclusive of accrued interest) not less than the amount of such moneys, or (2) held in such other manner as may then be required by applicable Federal or State of California laws and regulations and applicable state laws and regulations of the state in which the Trustee or such Depositary is located, regarding security for the deposit of trust funds; provided, however, that it shall not be necessary for the Trustee, the Depositaries or any Paying Agent to give security for the deposit of any moneys held in trust by it and set aside for the payment of principal or Redemption Price or Purchase Price of, or interest on, any Bonds or to give security for any moneys which are represented by obligations or certificates of deposit purchased as an investment of such moneys.

In computing the amount in any Fund created under the Indenture, obligations purchased as an investment of moneys therein shall be valued at the amortized costs of such obligations or the market value thereof, whichever is lower, exclusive of accrued interest except that obligations purchased as an investment of moneys in the Debt Service Reserve Account are to be valued at the amortized cost thereof.

Covenants

Encumbrances: Disposition of Properties

NCPA will not issue bonds, notes, debentures or other evidences of indebtedness, other than the Bonds, payable out of or secured by a pledge or assignment of the NCPA Revenues or other moneys, securities or funds held or set aside by NCPA, or the Fiduciaries under the Indenture, nor will it create, or cause to be created, any lien or charge thereon; provided, however, that nothing contained in the Indenture shall prevent NCPA from issuing, if and to the extent permitted by law, (1) evidences of indebtedness (a) payable out of moneys in the Construction Fund as part of the Cost of Acquisition and Construction of the Project or (b) payable out of, or secured by a pledge

and assignment of, NCPA Revenues to be derived on and after the discharge of the pledge of NCPA Revenues provided in the Indenture or (2) Subordinated Indebtedness or Notes issued in accordance with the provisions of the Indenture.

NCPA may, however, acquire, construct or finance through the issuance of its bonds, notes or other evidences of indebtedness any facilities which do not constitute a part of the Project for the purposes of the Indenture and may secure such bonds, notes or other evidences of indebtedness by a mortgage of the facilities so financed or by a pledge of, or lien on, the revenues therefrom or any lease or other agreement with respect thereto or any revenues derived from such lease or other agreement; provided that such bonds, notes or other evidences of indebtedness shall not be payable out of or secured by the NCPA Revenues or any Fund or Account held under the Indenture and neither the cost of such facilities nor any expenditure in connection therewith or with the financing thereof shall be payable from the NCPA Revenues or from any such Fund or Account.

NCPA will not sell, lease, mortgage or otherwise dispose of the Project or consent to the sale, lease, mortgage or other disposal of the Project other than in accordance with the Third Phase Agreement.

Rate Covenant

NCPA covenants in the Indenture that so long as any Bonds are Outstanding it will have good right and lawful power to establish charges and cause to be collected amounts with respect to the use of the Project, subject to the terms of the Third Phase Agreement. NCPA covenants in the Indenture that it will at all times establish charges and cause to be collected amounts with respect to the use of the Project, as shall be required to provide NCPA Revenues at least sufficient in each Fiscal Year, together with other available funds, for the payment of all the following:

- (a) NCPA Operating Expenses during such Fiscal Year;
- (b) An amount equal to the Aggregate Debt Service for such Fiscal Year;
- (c) The amount, if any to be paid during such Fiscal Year into the Debt Service Reserve Account and each Series Debt Service Reserve Account in the Debt Service Fund;
- (d) The amount, if any, to be paid during such Fiscal Year into the Subordinated Indebtedness Fund;
- (e) The amount, if any, to be paid during such Fiscal Year into the Note Fund;
- (f) The amount to be paid during such Fiscal Year into the Reserve and Contingency Fund for credit to the Renewal and Replacement Account and the Reserve Account therein; and
- (g) All other charges or liens whatsoever payable out of NCPA Revenues during such Fiscal Year.

In estimating Aggregate Debt Service on any Adjustable Rate Bonds for purposes of the preceding paragraph, NCPA shall be entitled to assume that such Adjustable Rate Bonds will bear such interest rate or rates as NCPA shall determine; provided, however, that the interest rate or rates assumed shall not be less than the interest rate borne by such Adjustable Rate Bonds at the time of determination of Aggregate Debt Service.

NCPA will not furnish or supply or cause to be furnished or supplied any use or service of the Project free of charge to any person, firm or corporation, public or private, and NCPA will, consistent with the Project Agreements and upon the direction of the Trustee, enforce the payment of any and all accounts owing to NCPA by reason of the Project by discontinuing such use or service, or by filing suit therefor, as soon as practicable 30 days after any such accounts are due, or by both such discontinuance and by filing suit.

Covenants with Respect to Third Phase Agreement and Project Agreements

NCPA covenants that it will receive and deposit in the Revenue Fund all amounts payable to it under the Third Phase Agreement or otherwise payable to it pursuant to any contract for use of the Project or any part thereof. NCPA will enforce the provisions of the Third Phase Agreement and duly perform its covenants and agreements thereunder, and will not agree to or permit any rescission of or amendment to, or otherwise take any action under or in connection with, the Third Phase Agreement which would reduce the payments required thereunder or which would in any manner materially impair or materially adversely affect the rights or security of Bondholders under the Indenture; provided, however, NCPA is specifically authorized to make certain amendments relating to billing procedures and the sale price of surplus power and energy under the Third Phase Agreement and is also not prohibited from making any other amendments to the Third Phase Agreement.

Subject to the terms of the Indenture, NCPA will enforce or cause to be enforced the provisions of the Project Agreements to which it is a party and duly perform its covenants and agreements thereunder. NCPA will not consent or agree to or permit any rescission of or amendment to or otherwise take any action under or in connection with the Project Agreements which will in any manner materially impair or materially adversely affect the rights of NCPA thereunder or the rights or security of the Bondholders under the Indenture.

Annual Budget

NCPA will file with the Trustee an Annual Budget prepared in accordance with the Third Phase Agreement for each Fiscal Year commencing with the first Power Supply Year. The Annual Budget will set forth the estimated NCPA Revenues and NCPA Operating Expenses of the Project by month for such Fiscal Year and shall include monthly appropriations for the estimated amount to be deposited in each month of such Fiscal Year in the Revenue Fund, including provision for any general reserve for NCPA Operating Expenses and the amount to be deposited in the Renewal and Replacement Account, the Reserve Account in the Reserve and Contingency Fund, the Rate Stabilization Account in the General Reserve Fund and the requirements, if any, for the amounts estimated to be expended from each Fund and Account. NCPA shall review quarterly its estimates set forth in the Annual Budget and in the event such estimates do not substantially correspond with the actual NCPA Revenues, NCPA Operating Expenses or other requirements, NCPA shall adopt an amended Annual Budget for the remainder of such Fiscal Year. NCPA is also required to adopt such an amended Annual Budget if there are at any time during the year extraordinary receipts or payments of unusual costs. NCPA may also at any time in accordance with the provisions of the Third Phase Agreement, adopt an amended Annual Budget for the remainder of the then current Fiscal Year.

Insurance

NCPA will at all times after commencement of construction of the Project, insure the Project or cause the Project to be insured against such causes customarily insured against and in such amounts as are usually obtained. NCPA will also use its best efforts to maintain or cause to be maintained any additional or other insurance which NCPA deems necessary or advisable to protect its interests and those of the Bondholders. If any useful portion of the Project is damaged or destroyed, NCPA shall, as expeditiously as possible, continuously and diligently enforce its right to cause to be prosecuted the reconstruction or replacement thereof. The proceeds of any insurance, including the proceeds of any self-insurance fund, paid on account of damage or destruction (other than any business interruption loss insurance) shall be held by the Trustee and applied, to the extent necessary, to pay the costs of reconstruction or replacement. The proceeds of any business interruption loss insurance shall be paid into the Revenue Fund unless otherwise required by the Third Phase Agreement.

Accounts and Reports

NCPA will keep or cause to be kept proper and separate books of records and accounts relating to the Project and each Fund and Account established by the Indenture and relating to the costs and charges under the Third Phase Agreement. Such books, together with the Third Phase Agreement and all other books and papers of NCPA relating to the Project, will at all times be subject to the inspection of the Trustee and the Holders of an aggregate of not less than 5% in principal amount of Bonds then Outstanding.

NCPA will file annually with the Trustee an annual report for each Fiscal Year, accompanied by an Accountant's Certificate, relating to the Project, including a statement of assets and liabilities as of the end of such

Fiscal Year, a statement of NCPA Revenues and NCPA Operating Expenses and a statement as to the existence of any default under the provisions of the Indenture.

NCPA will notify the Trustee forthwith of any Event of Default or default in the performance by NCPA of a provision of the Indenture. NCPA will file annually with the Trustee a certificate of an Authorized NCPA Representative stating whether, to the best of the signer's knowledge and belief, NCPA has complied with its covenants and obligations in the Indenture and whether there is then existing an Event of Default or other event which would become an Event of Default upon the lapse of time or the giving of notice, or both, and if any such default or Event of Default so exists, specifying the same and the nature and the status thereof.

The reports, statements and other documents required to be furnished to the Trustee pursuant to any provisions of the Indenture will be available for inspection of Bondholders at the office of the Trustee and will be mailed to each Bondholder who files a written request therefor with the Trustee. The Trustee may charge each Bondholder requesting such reports, statements or other documents a reasonable fee to cover reproduction, handling and postage.

Extension of Payment of Bonds

NCPA covenants in the Indenture that it will not extend or assent to the extension of the maturity of any of the Bonds, other than Lender Bonds, or claims for interest. If the maturity of any of the Bonds, other than Lender Bonds, or claims for interest is extended, such Bonds or claims for interest shall not be entitled, in the case of any default under the Indenture, to the benefit of the Indenture or any payment out of NCPA Revenues, Funds or the moneys held by the Trustee or by any Paying Agent or any Depository, except moneys held in trust for payment of (i) the principal of all Bonds Outstanding the maturity of which has not been extended, (ii) the portion of accrued interest on the Bonds which is not represented by such extended claims for interest and (iii) the accrued interest on the Lender Bonds. Nothing herein shall be deemed to limit the right of NCPA to issue Option Bonds or Refunding Bonds and neither such issuance nor the exercise by the Holder of any Option Bond of any of the rights appertaining to such Option Bond shall be deemed to constitute an extension of maturity of Bonds.

Amendments and Supplemental Indentures

Any of the provisions of the Indenture may be amended by NCPA by a Supplemental Indenture upon the consent of the Holders of at least sixty percent in principal amount in each case of (1) all Bonds then Outstanding and (2) if less than all of the several Series of Outstanding Bonds are affected, the Bonds of each affected Series; excluding, in each case, from such consent, and from the Outstanding Bonds, the Bonds of any specified Series and maturity if such amendment by its terms will not take effect so long as any of such Bonds remain Outstanding. Any such amendment may not permit a change in the terms of any Sinking Fund Installment or the terms of redemption or maturity of the principal of or interest on any Outstanding Bond or make any reduction in principal, Redemption Price, Purchase Price or interest rate without the consent of each affected Holder, or reduce the percentages of consents required for a further amendment.

NCPA may enter into (without the consent of any Holders of the Bonds or the Trustee), a Supplemental Indenture to close the Indenture against, or impose additional limitations upon, the issuance of Bonds or other evidences of indebtedness; to authorize Bonds of a Series; to add to the restrictions to be observed by NCPA contained in the Indenture; to add to the covenants of NCPA contained in the Indenture; to confirm any lien or pledge under the Indenture; to authorize the establishment of a fund or funds for self-insurance; to authorize Subordinated Indebtedness or Notes; and to modify any of the provisions of the Indenture in any other respect if (i) no Bonds will be Outstanding at such time or (ii) such modification shall be, and be expressed to be, effective only after all Bonds then Outstanding cease to be Outstanding and all Bonds authenticated and delivered after the adoption of such Supplemental Indenture specifically refer to such Supplemental Indenture in the text of such Bonds.

NCPA and the Trustee may also enter into a Supplemental Indenture (without the consent of any Holders of the Bonds required) which, upon the filing with the Trustee of a copy thereof and the filing with NCPA of an instrument in writing made by the Trustee consenting thereto, shall be fully effective in accordance with its terms, to cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in the Indenture or

to insert such provisions clarifying matters or questions arising under the Indenture as are necessary or desirable and are not contrary to or inconsistent with the Indenture.

Trustee; Payment Agents

The Trustee may at any time resign on 60 days' notice to NCPA. Such resignation will take effect on the date specified in such notice, or, if a successor Trustee has been appointed, such resignation will take effect immediately upon the appointment of such successor. The Trustee may at any time be removed by the Holders of a majority in principal amount of the Bonds then Outstanding. Successor Trustees may be appointed by the Holders of a majority in principal amount of Bonds then Outstanding, and failing such an appointment NCPA shall appoint a successor to hold office until the Bondholders act. The Trustee and each successor Trustee, if any, must be a bank, trust company, or national banking association doing business and having its principal office in New York, New York or Chicago, Illinois or Los Angeles, California or San Francisco, California and having capital stock and surplus aggregating at least \$50,000,000, or having all of its obligations guaranteed by a bank or trust company organized under the laws of the United States with a capital stock and surplus or net worth of \$50,000,000, if there be such an entity willing and able to accept the appointment on reasonable and customary terms. The Indenture requires the appointment by NCPA of one or more Paying Agents (which may include the Trustee).

Pursuant to the Indenture, the Trustee, prior to the occurrence of an Event of Default and after the curing of all Events of Default which may have occurred, undertakes to perform only such duties as are specifically set forth in the Indenture. If an Event of Default has occurred and has not been cured, the Trustee shall exercise such of the rights and powers vested in it by the Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs. Subject to the above, neither the Trustee nor any Paying Agent shall be liable in connection with the performance of its duties under the Indenture except for its own negligence, misconduct or default.

NCPA will cause to be paid to the Trustee and any Paying Agent or Depositary reasonable compensation for all services rendered under the Indenture and all reasonable expenses, charges, counsel fees and other disbursements, incurred in the performance of its duties under the Indenture. Each Trustee, Paying Agent or Depositary has a lien on any and all funds held by it under the Indenture securing its rights to compensation except that the proceeds of Drawings under the Letters of Credit or any funds taken into account in calculating the amount drawn under a Letter of Credit are not available for such purpose. NCPA also agrees to indemnify and save each Trustee, Paying Agent or Depositary harmless against any liabilities which it may incur in the exercise and performance of its powers and duties under the Indenture and which are not due to its negligence, misconduct or default.

Defeasance

The pledge of the Trust Estate under the Indenture and all covenants, agreements and other obligations of NCPA to the Bondholders under the Indenture will cease, terminate and become void and be discharged and satisfied whenever all Bonds have been paid in full. Bonds or interest installments will be deemed to have been paid for the purpose of the defeasance referred to above in this paragraph if on the maturity or redemption date thereof Eligible Moneys have been set aside and held in trust by the Paying Agents for such payment. Bonds, other than Lender Bonds, will be deemed to have been so paid prior to the maturity or redemption date thereof whenever the following conditions are met: (1) there have been deposited with the Trustee either Eligible Moneys in an amount which will be sufficient, or Investment Securities described in clause (i) of the definition thereof purchased with Eligible Moneys the principal of and the interest on which when due, will provide moneys which, together with the Eligible Moneys deposited, will be sufficient, to pay when due principal or Redemption Price, if applicable, and interest due and to become due on such Bonds, (2) in the case of Bonds to be redeemed prior to maturity, NCPA has given to the Trustee irrevocable instructions to mail the notice of redemption therefor, and (3) NCPA has given to the Trustee irrevocable instructions to (i) mail, as soon as practicable, notice to the Holders of such Bonds that the above deposit has been made with the Trustee and that such Bonds are deemed to be paid and stating the maturity or redemption date upon which moneys are to be available to pay principal or Redemption Price, if applicable, on such Bonds and (ii) publish a similar notice.

For purposes of determining whether Adjustable Rate Bonds shall be deemed to have been paid prior to the maturity or redemption date thereof, as the case may be, by the deposit of moneys, or Investment Securities and

moneys, if any, in accordance with the preceding paragraph, the interest to come due on such Adjustable Rate Bonds on or prior to the maturity date or redemption date thereof, as the case may be, shall be calculated at the Assumed Interest Rate; provided, however, that if on any date, as a result of such Adjustable Rate Bonds having borne interest at less than the Assumed Interest Rate for any period, the total amount of moneys and Investment Securities on deposit with the Trustee for the payment of interest on such Adjustable Rate Bonds is in excess of the total amount which would have been required to be deposited with the Trustee on such date in respect of such Adjustable Rate Bonds in order to satisfy the preceding paragraph, the Trustee shall, if requested by NCPA, pay the amount of such excess to NCPA free and clear of any trust, lien, pledge or assignment securing the Bonds or otherwise existing under the Indenture.

Option Bonds shall be deemed to have been paid in accordance with the Indenture only if there shall have been deposited with the Trustee moneys in an amount which shall be sufficient to pay when due the maximum amount of principal or Redemption Price, if any, and interest on such Bonds which could become payable to the Holders of such Bonds upon the exercise of any options provided to the Holders of such Bonds; provided, however, that if, at the time a deposit is made with the Trustee as described above, the options originally exercisable by the Holder of an Option Bond are no longer exercisable, such Bond shall not be considered an Option Bond for purposes of this paragraph. If any portion of the moneys deposited with the Trustee for the payment of the principal of and Redemption Price, if any, and interest on Option Bonds is not required for such purpose the Trustee shall, if requested by NCPA, pay the amount of such excess to NCPA free and clear of any trust, lien, pledge or assignment securing said Bonds or otherwise existing under the Indenture.

Events of Default and Remedies

Events of Default specified in the Indenture include (i) failure to pay principal or Redemption Price of any Bond when due; (ii) failure to pay any interest installment on any Bond or the unsatisfied balance of any Sinking Fund Installment thereon when due; (iii) failure to pay the Purchase Price of any Option Bond at the time required by the Indenture and such default shall continue for 10 days; (iv) notice from the Banks' Agent of an "event of default" under certain Reimbursement Agreements (none of which is in effect); (v) if there is default by NCPA for 120 days after written notice thereof from the Trustee or the Holders of not less than 10% in principal amount of the Bonds then Outstanding in the observance or performance of any other covenants, agreements or conditions contained in the Indenture or in the Bonds; (vi) NCPA shall apply for or consent to the appointment of a receiver or admit in writing its inability to pay its debts generally as they become due; and (vii) a proceeding shall be instituted in any court of competent jurisdiction under any law relating to bankruptcy, insolvency, reorganization or relief of debtors and the same shall result in an entry of an order for relief or continue undismissed or pending unstayed for a period of 60 days. Upon the happening of any such Event of Default described in clause (i), (ii), (iii), (v), (vi) or (vii) above, the Trustee or the Holders of not less than 25% in principal amount of the Bonds then Outstanding may declare the principal of and accrued interest on all Bonds then Outstanding due and payable (subject to a rescission of such declaration upon the curing of such default before the Bonds have matured).

Upon the occurrence of any Event of Default which has not been remedied, NCPA will, if demanded by the Trustee, (1) account, as a trustee of an express trust, for all NCPA Revenues and other moneys, securities and funds pledged or held under the Indenture and (2) cause to be paid over to the Trustee (a) forthwith, all moneys, securities and funds then held by NCPA in any Fund under the Indenture and (b) as received, all NCPA Revenues. The Trustee will apply all moneys, securities, funds and NCPA Revenues received during the continuance of any Event of Default in the following order: (1) to payment of the reasonable and proper charges, expenses and liabilities of the Trustee, the Depositaries and Paying Agents, (2) to the payment of NCPA Operating Expenses, and (3) to the payment of interest on and principal or Redemption Price of the Bonds without preference or priority of interest over principal or Redemption Price or of principal or Redemption Price over interest, unless the principal of all Bonds has not been declared due and payable, in which case first to the payment of interest on and second to the payment of principal or Redemption Price of those Bonds which have become due and payable in order of their due dates, and in the amount available for such payment thereof, ratably, according to the amounts of interest or principal or Redemption Price, respectively, due on such date. In addition, the Trustee will have the right to apply in an appropriate proceeding for appointment of a receiver of the Project.

If an Event of Default has occurred and has not been remedied, the Trustee may, and on request of the Holders of not less than 25% in principal amount of Bonds Outstanding must, proceed to protect and enforce its rights and the rights of the Bondholders under the Indenture forthwith by a suit or suits in equity or at law, whether

for the specific performance of any covenant in the Indenture or in aid of the execution of any power granted in the Indenture or any remedy granted under the Act, or for an accounting against NCPA as if NCPA were the trustee of an express trust, or in the enforcement of any other legal or equitable right as the Trustee deems most effectual to enforce any of its rights or to perform any of its duties under the Indenture. The Trustee may, and upon the request of the Holders of a majority in principal amount of the Bonds then Outstanding and upon being furnished with reasonable security and indemnity must, institute and prosecute proper actions to prevent any impairment of the security under the Indenture or to preserve or protect the interests of the Trustee and of the Bondholders.

Upon the occurrence of an Event of Default, NCPA shall give notice to each Project Participant that such Project Participant shall make the payments due by it under the Third Phase Agreement directly to the Trustee.

Except as otherwise provided in the last sentence of this paragraph and except for the rights specifically conferred on the Banks and the Banks' Agent pursuant to the Indenture, no Bondholder will have any right to institute any suit, action or proceeding for the enforcement of any provision of the Indenture or the execution of any trust under the Indenture or for any remedy under the Indenture, unless (1) such Bondholder previously has given the Trustee written notice of an Event of Default, (2) the Holders of at least 25% in principal amount of the Bonds then Outstanding have filed a written request with the Trustee and have afforded the Trustee a reasonable opportunity to exercise its powers and institute such suit, action or proceeding, (3) there has been offered to the Trustee adequate security and indemnity against its costs, expenses and liabilities to be incurred and (4) the Trustee has refused to comply with such request within 60 days after receipt by it of such notice, request and offer of indemnity. The Indenture provides that nothing therein or in the Bonds affects or impairs NCPA's obligation to pay the Bonds and interest thereon due or the right of any Bondholder to enforce such payment of his Bonds.

The Banks' Agent or the Holders of not less than a majority in principal amount of Bonds then Outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, subject to the Trustee's right to decline to follow such direction upon advice of counsel as to the unlawfulness thereof or upon its good faith determination that such action would involve the Trustee in personal liability or would be unjustly prejudicial to Bondholders not parties to such direction.

Notice of Default

The Trustee shall promptly mail written notice of the occurrence of any Event of Default to each Holder of Bonds at his address, if any, appearing on the registry books of NCPA.

Unclaimed Moneys

Any moneys held by the Trustee, a Paying Agent or Depositary in trust for the payment and discharge of any of the Bonds which remain unclaimed for six years after the date when such Bonds have become due and payable, either at maturity or by call for redemption (unless such moneys were not held at the time of such maturity or call for redemption, and then which remain unclaimed for six years after the date of deposit of such moneys with the Trustee, Paying Agent or Depositary), shall, at the written request of NCPA and after meeting certain publication requirements, be repaid to NCPA, and such Trustee, Paying Agent or Depositary shall thereupon be released and discharged with respect thereto and the Bondholders shall look only to NCPA for the payment of such Bonds.

APPENDIX E

**COPY OF FINAL APPROVING OPINION OF BOND COUNSEL
DATED APRIL 2, 2008**

APPENDIX F

**PROPOSED FORM OF OPINION OF BOND COUNSEL IN CONNECTION
WITH THE DELIVERY OF THE LETTER OF CREDIT**

APPENDIX G
FORM OF THE LETTER OF CREDIT

APPENDIX H

**ESTIMATED DEBT SERVICE REQUIREMENTS
ON THE HYDROELECTRIC PROJECT BONDS**

The following table shows the combined estimated annual debt service requirements for the Hydroelectric Project Bonds. Principal amounts set forth in the table below include sinking fund redemptions.

Year Ended (July 1)	Outstanding Hydroelectric Project Bonds ⁽¹⁾		
	Principal	Interest ⁽²⁾	Total
2020			
2021			
2022			
2023			
2024			
2025			
2026			
2027			
2028			
2029			
2030			
2031			
2032			
Total⁽³⁾			

⁽¹⁾ Includes the outstanding 2008 Bonds, the 1992 Refunding Series A Bonds, 2010 Refunding Series A Bonds, 2012 Refunding Series A, 2012 Taxable Refunding Series B Bonds, 2018 Refunding Series A Bonds, 2018 Taxable Refunding Series B Bonds and 2019 Refunding Series A Bonds.

⁽²⁾ Interest rate on the 2008 Bonds is assumed to be the swap rate.

⁽³⁾ Totals may not add due to rounding.

LETTER OF CREDIT REIMBURSEMENT AGREEMENT

Between

NORTHERN CALIFORNIA POWER AGENCY

and

BANK OF AMERICA, N.A.

Relating to

\$85,160,000

Northern California Power Agency
Hydroelectric Project Number One Revenue Bonds
2008 Refunding Series A

Dated as of June 1, 2019

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LETTER OF CREDIT REIMBURSEMENT AGREEMENT

This LETTER OF CREDIT REIMBURSEMENT AGREEMENT is dated as of June 1, 2019, between NORTHERN CALIFORNIA POWER AGENCY and BANK OF AMERICA, N.A. All capitalized terms used herein and not otherwise defined shall have the meanings assigned in Section 1.01 or as otherwise provided in Section 1.02.

WITNESSETH:

WHEREAS, NCPA has issued its Bonds pursuant to the terms of the Indenture;

WHEREAS, to enhance the marketability of the Bonds, NCPA has requested that the Bank issue the Letter of Credit to secure certain payments to be made with respect to the Bonds in the amount of **[\$90,815,558]**, of which **[\$85,160,000]** will be available to pay principal of the Bonds either at maturity or upon redemption or acceleration thereof or to pay the portion of the Purchase Price of Bonds representing the principal amount thereof, and of which **[\$5,655,558]** (202 days of interest on the principal amount of Bonds calculated at the rate of 12% and computed on the basis of a year of 365 days) will be available to pay interest on the Bonds as interest becomes due or to pay the portion of the Purchase Price of the Bonds representing the accrued interest thereon;

WHEREAS, the payment of the Bonds and the payment of all obligations to the Bank hereunder are secured by the pledge of and lien on the Trust Estate;

WHEREAS, NCPA and the Bank intend for the Letter of Credit to constitute an Alternate 2008 Series A Credit Facility and an Alternate 2008 Series A Liquidity Facility in replacement for the letter of credit previously provided by Bank of Montreal, acting through its Chicago Branch ("*Bank of Montreal*"), and for this Reimbursement Agreement to constitute a 2008 Series A Credit Reimbursement Agreement and a 2008 Series A Liquidity Reimbursement Agreement under the Indenture; and

WHEREAS, the Bank has agreed to issue the Letter of Credit pursuant to the terms hereof.

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, including the covenants, terms and conditions hereinafter contained, and to induce the Bank to issue the Letter of Credit, the Bank and NCPA agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Definitions. In addition to terms defined at other places in this Reimbursement Agreement, the following defined terms are used throughout this Reimbursement Agreement with the following meanings:

“Act” means Chapter 5 of Division 7 of Title 1 of the Government Code of California, as amended from time to time, and all laws amendatory and supplemental thereto.

“Affiliate” means, with respect to any Person, any Person that directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such first Person. A Person shall be deemed to control another Person for the purposes of this definition if such first Person possesses, directly or indirectly, the power to direct, or cause the direction of, the management and policies of the second Person, whether through the ownership of voting securities, common directors, trustees or officers, by contract or otherwise.

“Alternate Credit Facility” means any replacement facility meeting the requirements of an Alternate 2008 Series A Credit Facility pursuant to Section 406 of the Supplemental Indenture delivered in replacement of the Letter of Credit.

“Alternate Liquidity Facility” means any replacement facility meeting the requirements of an Alternate 2008 Series A Liquidity Facility pursuant to Section 410 of the Supplemental Indenture delivered in replacement of the Letter of Credit.

“Amortization End Date” means, with respect to any Principal Purchase Drawing, the earliest to occur of:

- (i) the date which is three (3) years after such Principal Purchase Drawing;
- (ii) the third (3rd) anniversary of the Stated Expiration Date; *provided*, that if the Stated Expiration Date has been extended from time to time, such three (3) year anniversary shall relate to the Stated Expiration Date as in effect on the date of such Principal Purchase Drawing;
- (iii) the date on which the principal of the Bonds purchased with the proceeds of such Principal Purchase Drawing is paid or becomes due and payable pursuant to the terms of the Indenture whether by redemption, maturity, acceleration or otherwise;
- (iv) the date on which amounts are declared or otherwise become due and payable hereunder pursuant to Section 7.02;
- (v) the date on which the Bonds purchased with the proceeds of such Principal Purchase Drawing are remarketed (but, in the case of this clause, only a principal amount equal to the principal amount of such remarketed Bonds shall be due);
- (vi) the date of the delivery of an Alternate Credit Facility or Alternate Liquidity Facility;
- (vii) the first Conversion Date immediately succeeding such Principal Purchase Drawing;

(viii) the date on which the Original Stated Amount is permanently reduced to zero or the Letter of Credit is otherwise terminated in accordance with its terms (other than as a result of the Letter of Credit terminating on the Stated Expiration Date), including as a result of the occurrence of an Event of Default; and

(ix) the date on which NCPA issues Debt, the proceeds of which could be used to repay such Principal Purchase Drawing (excluding the issuance of Debt the proceeds of which are specifically designated for purposes inconsistent with such use).

“*Annual Budget*” shall have the meaning assigned to such term in the Indenture.

“*Authorized Denominations*” shall have the meaning assigned to such term in the Supplemental Indenture.

“*Bank*” means Bank of America, N.A., and its successors and assigns.

“*Bank Bond CUSIP Number*” means 664845 EL4.

“*Bank Bondholder*” means the Bank (but only in its capacity as Owner of Bank Bonds pursuant to this Reimbursement Agreement) and any other Person to whom the Bank has sold Bank Bonds pursuant to Section 2.03(d).

“*Bank Bonds*” means Bonds which have been purchased with the proceeds of a draw on the Letter of Credit, so long as the Bank, its nominee, or a custodian for its benefits, is the Owner of such Bonds.

“*Bank Rate*” means, for any day the same is to be determined, a rate of interest per annum with respect to any Principal Purchase Drawing (i) from and including the date such Principal Purchase Drawing is made to and including the ninetieth (90th) day immediately succeeding the date such Principal Purchase Drawing is made, the Base Rate from time to time in effect and (ii) from and including the ninety-first (91st) day immediately succeeding date such Principal Purchase Drawing is made and at all times thereafter, equal to the Term Loan Rate; *provided, however*, that immediately and automatically upon the occurrence of an Event of Default (and without any notice given with respect thereto) and during the continuance of such Event of Default, “Bank Rate” shall mean the Default Rate; and *provided, further*, that, at no time shall the Bank Rate be less than the applicable rate on any Bonds which are not Bank Bonds.

“*Base Rate*” means, for any day, a fluctuating rate of interest rate per annum equal to the greatest of: (a) the Prime Rate in effect at such time *plus* 1.00%, (b) the Federal Funds Rate in effect in effect at such time *plus* 2.00% and (c) seven percent (7.00%). Each determination of the Base Rate by the Bank shall be conclusive and binding on NCPA absent manifest error.

“*Bondholder*” shall have the meaning assigned to such term in the Indenture.

“*Bonds*” means NCPA’s Hydroelectric Project Number One Revenue Bonds, 2008 Refunding Series A.

“*Business Day*” means any day other than (a) a Saturday or a Sunday, (b) day on which banks located in Los Angeles, California, New York, New York, the cities in which the principal office of any of the Trustee, the Tender Agent or the Bank is located are required or authorized by law to close or (c) a day on which the New York Stock Exchange is closed. For purposes of this definition, the Bank’s principal office shall be that office of the Bank at which Drawings are to be presented under the Letter of Credit.

“*Capital Lease Obligations*” of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

“*Change in Law*” means the occurrence, after the Closing Date, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “*Change in Law*”, regardless of the date enacted, adopted or issued.

“*Closing Date*” means June [___], 2019, or such later date on which this Reimbursement Agreement is fully executed and delivered.

“*Code*” means the Internal Revenue Code of 1986, as amended, and, where appropriate any statutory predecessor or any successor thereto, and the Treasury regulations in effect from time to time thereunder.

“*Conversion Date*” means the date on which the interest rate borne by the Bonds is converted to a rate other than a Covered Rate.

“*Covered Rate*” means the Weekly Rate.

“*Credit Facility*” shall have the meaning assigned to the term 2008 Series A Credit Facility in the Supplemental Indenture.

“*Custody Agreement*” means that certain Custody Agreement dated as of the Closing Date between the Bank and the Trustee in substantially the form of Exhibit B hereto.

“*Debt*” means with respect to any Person, all items that would be classified as a liability in accordance with GAAP, including, without limitation, (a) indebtedness or liability for borrowed money including amounts drawn under a letter of credit or other credit facility, or for the deferred purchase price of property or services (including trade obligations), including, without limitation, bonds, debentures, notes, loan agreements or other similar instruments; (b) all Capital Lease Obligations of such Person; (c) all obligations arising under acceptance facilities, letters of credit and other evidence of indebtedness representing extensions of credit whether or not representing obligations for borrowed money; (d) current liabilities in respect of unfunded benefits under employee benefit, retirement or pension plans; (e) all Guarantees and other contingent obligations to purchase, to provide funds for payment, to supply funds to invest in any other Person or otherwise to assure a creditor against loss; (f) obligations secured by any Lien on property, whether or not the obligations have been assumed; (g) all unfunded amounts under a loan agreement, letter of credit, or other credit facility for which such Person would be liable, if such amounts were advanced under the credit facility; (h) all obligations of such Person to purchase securities (or other property) which arise out of or in connection with the sale of the same or substantially similar securities or property; and (i) obligations of such Person under Interest Rate Protection Agreements. The term “Debt” when used with regard to the Debt of NCPA shall be limited to the Debt of NCPA which is payable from or secured by a Lien on the Trust Estate and shall not include NCPA Operating Expenses, as defined in the Indenture.

“*Debtor Relief Laws*” means the Bankruptcy Code of the United States, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief Laws of the United States or other applicable jurisdictions from time to time in effect.

“*Default*” means the occurrence of any event or the existence of any condition which constitutes an Event of Default or the occurrence of any event or the existence of any condition which with the giving of notice, the passage of time, or both, would constitute an Event of Default.

“*Default Rate*” means, for any day, a rate of interest per annum equal to the sum of the Base Rate in effect on such day plus *plus* four percent (4.00%).

“*Designated Jurisdiction*” means any country or territory to the extent that such country or territory itself is the subject of any Sanction.

“*Determination Counsel*” means a firm of attorneys of nationally-recognized standing in matters pertaining to the validity of and tax-exempt nature of interest on bonds and other debt instruments issued by states and their political subdivisions, designated by NCPA and acceptable to the Bank in its reasonable discretion.

“*Differential Interest Amount*” means the excess of (a) interest which has accrued and could actually be paid on Bank Bonds at the Base Rate, as determined in accordance with

Section 2.01, up to but excluding the Business Day on which such Bank Bonds are purchased from the Bank Bondholders pursuant to Section 2.03(f), less (b) the interest accrued on such Bonds received by the Bank Bondholders as part of the Sale Price.

“*Drawing*” means any Interest Drawing, Interest Purchase Drawing, Principal Drawing or Principal Purchase Drawing.

“*DTC*” shall have the meaning assigned to such term in Section 2.03(a) hereof.

“*Environmental Claim*” means any and all administrative, regulatory or judicial investigations, proceedings, actions, suits, demand letters, claims, liens, notices of noncompliance or violation, relating in any way to any Environmental Law (“claims”) or any permit issued under any such Environmental Law, including without limitation (a) any and all claims by Governmental Authorities for enforcement, cleanup, removal, response, remedial, or other actions or damages pursuant to any applicable Environmental Law, and (b) any and all claims by any third party seeking damages, contribution, indemnification, cost recovery, compensation or injunctive relief resulting from Hazardous Materials or arising from alleged injury or threat of injury to health, safety or the environment.

“*Environmental Law(s)*” means any and all federal, state and local statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or other governmental restrictions relating to air, water or land pollution, wetlands or the protection of the environment or to emissions, discharges or releases of Hazardous Materials into the environment, including, without limitation, ambient air, surface water, ground water, or land, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials or the clean up or other remediation thereof.

“*Environmental Liability*” means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of NCPA directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, presence, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release or threatened release of any Hazardous Materials into the environment or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

“*ERISA*” means the Employee Retirement Income Security Act of 1974, as amended from time to time, and all rules and regulations from time to time promulgated thereunder, or any successor statute.

“*Event of Default*,” in relation to this Reimbursement Agreement, shall have the meaning assigned to such term in Article VII, and in relation to any Related Document, shall have the meaning set forth therein.

“*Event of Insolvency*” means, with respect to any Person, the occurrence of one or more of the following events:

(a) the issuance, under the laws of any state or under the laws of the United States, of an order of rehabilitation, relief, liquidation, winding up, reorganization, arrangement, marshalling of assets, adjustment or dissolution of such Person or composition of it or its debts;

(b) the commencement by or against such Person of a case or other proceeding seeking liquidation, reorganization or other relief with respect to such Person or its debts under any bankruptcy, insolvency or other similar state or federal law now or hereafter in effect or to adjudicate it Insolvent, including, without limitation, the appointment of a trustee, receiver, examiner, liquidator, custodian or other similar official for such Person or any substantial part of its property (with respect to NCPA) or there shall be appointed or designated with respect to it, an entity such as an organization, board, commission, authority, agency or body to monitor, review, oversee, recommend or declare a financial emergency or similar state of financial distress with respect to it or there shall be declared by it or by any legislative or regulatory body with competent jurisdiction over it, the existence of a state of financial emergency or similar state of financial distress in respect of it;

(c) the making of an assignment for the benefit of creditors by such Person;

(d) the failure of such Person to generally pay its debts as they become due;

(e) the declaration of a moratorium, restructuring, adjustment or comparable extraordinary restriction on the repayment when due and payable of any debts of such Person;

(f) such Person shall admit in writing its inability to pay its debts when due or shall become insolvent; or

(g) the initiation of any actions to authorize any of the foregoing by or on behalf of such Person or the failure by such Person to file an answer or other pleading denying the material allegations of any such proceeding filed against such Person.

“*Excess Interest Amount*” shall have the meaning assigned to such term in Section 2.10(b) hereof.

“*Facilities Agreement*” means the Amended and Restated Facilities Agreement, dated as of October 1, 2014 (the “Amended and Restated Facilities Agreement”), by and among NCPA and the Member Governments party thereto, as the same may be amended and supplemented from time to time.

“*Federal Funds Rate*” means, for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve

System arranged by federal funds brokers on such day, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day; *provided* that (a) if such day is not a Business Day, the Federal Funds Rate for such day shall be such rate on such transactions on the next preceding Business Day as so published on the next succeeding Business Day, and (b) if no such rate is so published on such next succeeding Business Day, the Federal Funds Rate for such day shall be the average rate (rounded upward, if necessary, to a whole multiple of 1/100 of 1%) charged to the Bank on such day on such transactions as determined by the Bank.

“*Fee Letter*” means the Fee Letter dated the Closing Date between NCPA and the Bank, and all amendments, modifications, restatements and extensions of such fee letter, entered into from time to time and any other agreement delivered in substitution or exchange for such fee letter.

“*FERC*” means the Federal Energy Regulatory Commission, and any successor thereto.

“*Fiscal Year*” means the fiscal year of NCPA ending on June 30 of each calendar year.

“*Fitch*” means Fitch Ratings, Inc., and any successor rating agency.

“*FRB*” means the Board of Governors of the Federal Reserve System of the United States, together with any successors thereof.

“*GAAP*” means accounting principles generally accepted and consistently applied to governmental entities in the United States, as set forth in the opinions and pronouncements of the Accounting Principles Board, the American Institute of Certified Public Accountants, the Governmental Accounting Standards Board and the Financial Accounting Standards Board or in such other statements by such other entity as may be in general use by significant segments of the accounting profession as in effect on the date hereof as modified in the manner described in the notes to the audited financial statements of NCPA.

“*Governing Documents*” means, collectively, the Joint Powers Agreement as applicable to the establishment and maintenance of NCPA as a joint exercise of powers entity.

“*Governmental Approvals*” means (a) an authorization, consent, approval, permit, license or certificate of occupancy of any Governmental Authority, (b) an exemption provided by any Governmental Authority, or (c) a registration or filing required by any Governmental Authority.

“*Governmental Authority*” means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including, without limitation, the Financial Conduct Authority, the Prudential Regulation Authority and any supra-national bodies such as the European Union or the European Central Bank).

“*Guarantee*” of or by any Person (the “guarantor”) means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Debt or other obligation of any other Person (the “primary obligor”) in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt or other obligation (whether arising by virtue of partnership arrangements, by agreement to keep-well, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise) or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Debt or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Debt or other obligation, (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Debt or obligation or (e) entered into for the purpose of assuring in any other manner the obligee of such Debt or other obligation of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part); *provided*, that the term *Guarantee* shall not include endorsements for collection or deposit in the ordinary course of business.

“*Hazardous Materials*” means all explosive or radioactive substances or wastes and all hazardous or toxic substances, contaminants, chemicals, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

“*Indenture*” means, collectively, the Original Indenture and the Supplemental Indenture.

“*Ineligible Bonds*” shall have the meaning assigned to such term in the Letter of Credit.

“*Insolvent*” shall have the meaning assigned to such term in Section 101(32) of the U.S. Bankruptcy Code.

“*Interest Drawing*” means a drawing under the Letter of Credit pursuant to an Interest Drawing, as defined in the Letter of Credit, to pay interest on the Bonds when due.

“*Interest Purchase Drawing*” means the portion of a drawing under the Letter of Credit pursuant to a Liquidity Drawing, as defined in the Letter of Credit, to pay the portion of the Purchase Price of Bonds representing accrued interest on Bonds to be purchased.

“*Interest Rate Protection Agreement*” means (a) any rate swap transaction, basis swap, credit derivative transaction, forward rate transaction, commodity swap, commodity option, forward commodity contract, equity or equity index swap, equity or equity index option, bond or bond price or bond index swap or option or forward bond or forward bond price or forward bond index transaction, interest rate option, foreign exchange transaction, cap transaction, floor transaction, collar transaction, currency swap transaction, cross-currency rate swap transaction, currency option, spot contract, total return swap, credit default swap or any other similar transaction (including any option with respect to any of these transactions) and any other

agreement or option involving, or settled by reference to, one or more rates, currencies, commodities, equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions whether or not any such transaction is governed by or subject to any master agreement, and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc. or any International Foreign Exchange Master Agreement (any such master agreement, together with any related schedules, a “*Master Agreement*”), including any such obligations or liabilities under any Master Agreement, in each case, entered into by NCPA and which in each case is related to any Debt of NCPA payable from the Trust Estate or to the Project; *provided* that Interest Rate Protection Agreement shall not include any power purchase agreement, or an option thereon, to provide electric power in lieu of power from the Project or any forward purchase contract related to natural gas.

“*Investment Policy*” means NCPA’s investment policy and guidelines as authorized by Section 53600 et seq. of the State’s Government Code.

“*Investor CUSIP Number*” means 664845 BE3.

“*ISP98*” shall have the meaning assigned to such term in the Letter of Credit.

“*Joint Powers Agreement*” means the Amended and Restated Northern California Power Agency Joint Powers Agreement, dated as of January 1, 2008, among the Member Governments party thereto authorized pursuant to the Act, as the same may be amended and supplemented from time to time in accordance with terms hereof and thereof.

“*Laws*” means, collectively, all federal, state and local statutes, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“*Letter of Credit*” means the irrevocable direct-pay letter of credit supporting the Bonds issued by the Bank for the account of NCPA in favor of the Trustee pursuant to this Reimbursement Agreement in the form of Appendix I hereto with appropriate insertions, as amended from time to time.

“*Letter of Credit Fee*” shall have the meaning assigned to such term in the Fee Letter.

“*Lien*” means any mortgage, pledge, hypothecation, assignment, deposit arrangement, encumbrance, lien (statutory or other), charge, or preference, priority or other security interest or preferential arrangement in the nature of a security interest of any kind or nature whatsoever (including any conditional sale or other title retention agreement, any easement, right of way or

other encumbrance on title to real property, and any financing lease having substantially the same economic effect as any of the foregoing).

“*Liquidity Facility*” shall have the meaning assigned to the term 2008 Series A Liquidity Facility in the Supplemental Indenture.

“*London Banking Day*” means any day on which dealings in United States dollar deposits are conducted by and between banks in the London interbank eurodollar market.

“*Margin Stock*” has the meaning ascribed to such term in Regulation U promulgated by the FRB, as now and hereafter from time to time in effect.

“*Material Adverse Effect*” (a) a material adverse change in, or a material adverse effect upon, the operations, business, properties, liabilities (actual or contingent) or condition (financial or otherwise) of NCPA affecting the NCPA Revenues or the Project; (b) a material impairment of the ability of NCPA to perform its obligations under this Reimbursement Agreement or the Fee Letter; or (c) a material adverse effect upon the legality, validity, binding effect or enforceability against NCPA of this Reimbursement Agreement, the Fee Letter or any Related Document to which it is a party or the rights, security, interests or remedies of the Bank hereunder or under any other Related Document.

“*Material Litigation*” shall have the meaning assigned to such term in Section 4.07.

“*Maximum Rate*” means the lesser of (a) 18% and (b) the maximum rate of interest on the relevant obligation permitted by applicable law without regard to any filing made by a lender with respect to notice of rates in excess of any statutory or regulatory threshold interest rate.

“*Member Governments*” means the governmental entities which are signatory to the Joint Powers Agreement and are indicated on Exhibit C, as said Exhibit may be amended and supplemented from time to time.

“*Moody’s*” means Moody’s Investors Service, Inc., and any successor rating agency.

“*NCPA*” means the Northern California Power Agency, and its successors and assigns permitted hereunder.

“*NCPA Revenues*” shall have the meaning assigned to such term in the Indenture.

“*Obligations*” means all payment obligations of NCPA under or with respect to the Bank Bonds, the Principal Purchase Drawings, the Letter of Credit Fees, the Reimbursement Obligations and all other payment obligations of NCPA to the Bank arising under or in relation to this Reimbursement Agreement, the Fee Letter or any other Related Document, including in each instance, all interest accrued thereon.

“*OFAC*” means the Office of Foreign Assets Control of the United States Department of the Treasury.

“*Organizational Documents*” means, collectively, the Joint Powers Agreement, the Act, the Constitution of the State and any regulatory or statutory provisions of each Governmental Authority (including FERC) having jurisdiction over the NCPA and its business.

“*Original Indenture*” means the Indenture of Trust dated as of March 1, 1985 by and between NCPA and the Trustee, as previously amended, and as the same may be further amended, modified or restated in accordance with the terms thereof and hereof.

“*Original Stated Amount*” shall have the meaning assigned to such term in the Letter of Credit.

“*Outstanding*” shall have the meaning assigned to such term in the Original Indenture.

“*Owner*” means the registered owner of a Bond or, if the Bonds are held in book-entry form, the beneficial owner of such Bond.

“*Parity Creditor*” means the obligee of any Parity Debt.

“*Parity Debt*” means any Debt of NCPA (including the Bonds) currently outstanding or to be issued, secured by a lien on, and payable from, the Trust Estate on a parity with or senior to the Bonds.

“*Participant(s)*” means any bank(s) or other financial institution(s) which may purchase a participation interest from the Bank in the Letter of Credit, this Reimbursement Agreement and certain of the Related Documents pursuant to a participation agreement between the Bank and the Participant(s).

“*Patriot Act*” has the meaning set forth in Section 10.14 hereof.

“*Pension Plan*” means any “employee pension benefit plan” with respect to which NCPA is obligated to make contributions.

“*Person*” means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

“*Power Purchase Contract*” shall have the meaning assigned to such term in the Indenture.

“*Prime Rate*” means on any day, the rate of interest in effect for such day as publicly announced from time to time by the Bank as its “prime rate.” The “*prime rate*” is a rate set by the Bank based upon various factors including the Bank’s costs and desired return, general economic conditions and other factors, and is used as a reference point for pricing some loans, which may be priced at, above, or below such announced rate. Any change in such rate announced by the Bank shall take effect at the opening of business on the day specified in the public announcement of such change.

“Principal Drawing” means a drawing under the Letter of Credit pursuant to a Redemption Drawing, as defined in the Letter of Credit, to pay principal of the Bonds.

“Principal Purchase Drawing” means a drawing under the Letter of Credit pursuant to a Liquidity Drawing, as defined in the Letter of Credit, to pay the portion of the Purchase Price of Bonds representing the principal amount of Bonds to be purchased.

“Project” shall have the meaning assigned to such term in the Indenture.

“Project Participants” shall have the meaning assigned to such term in the Indenture.

“Purchase Notice” shall have the meaning assigned to such term in Section 2.03(e).

“Purchase Price” means, with respect to any Bond tendered for purchase pursuant to the Indenture, an amount equal to the principal amount of such Bond plus, with respect to any Bond tendered for purchase on a date which is not a scheduled interest payment date for such Bond, accrued but unpaid interest.

“Purchaser” shall have the meaning assigned to such term in Section 2.03(e).

“Rating Agency” means each of S&P, Fitch, Moody’s, or any successor or additional rating agency that then rates the Bonds at the written request of NCPA. For avoidance of doubt, on the Closing Date only _____ and _____ are Rating Agencies for this purpose.

“Reduction Fee” shall have the meaning assigned to such term in the Fee Letter.

“Reimbursement Agreement” means this Letter of Credit Reimbursement Agreement.

“Reimbursement Obligations” means, collectively, any and all obligations of NCPA to reimburse the Bank for any Drawings under the Letter of Credit and all obligations to repay the Bank for any Drawing, including in each instance all interest accrued thereon.

“Related Documents” means, collectively, the Letter of Credit, the Fee Letter, the Indenture, the Remarketing Agreement, the Custody Agreement, the Bonds, the Power Purchase Contract, the Third Phase Agreement, the Facilities Agreement and the Tender Agent Agreement, and any and all future renewals and extensions or restatements of, or amendments or supplements to, any of the foregoing permitted hereunder and thereunder.

“Remarketing Agent” means the Person acting from time to time as the Remarketing Agent under the Indenture and the Remarketing Agreement.

“Remarketing Agreement” means the Remarketing Agreement by and between NCPA and the Remarketing Agent dated as of April 1, 2008, and any similar agreement between NCPA and any successor Remarketing Agent.

“*Remarketing Memorandum*” means the Remarketing Memorandum dated June [], 2019 (including the cover page and all summary statements, appendices and other materials included or incorporated by reference or attached thereto), as amended or supplemented or any other preliminary or final official statement of NCPA or prospectus used with respect to the remarketing of the Bonds.

“*S&P*” means S&P Global Ratings, and any successor rating agency.

“*Sale Date*” shall have the meaning assigned to such term in Section 2.03(e).

“*Sale Price*” shall have the meaning assigned to such term in Section 2.03(e).

“*Sanction(s)*” means any international economic sanction administered or enforced by the United States Government (including, without limitation, OFAC) or other relevant sanctions authority.

“*Significant Share Project Participant*” means those Project Participants designated as such on Exhibit C, as said Exhibit may be amended and supplemented from time to time, whose individual project entitlement percentages are equal to 10% or greater of the Project and, collectively with the other Significant Share Project Participants, aggregate over 90% of the Project.

“*State*” means the State of California.

“*Stated Expiration Date*” has the meaning set forth in the Letter of Credit.

“*Supplemental Indenture*” means the Sixteenth Supplemental Indenture of Trust dated as of April 1, 2008 by and between NCPA and the Trustee relating to the Bonds, as the same may be amended, modified or restated from time to time in accordance with terms hereof and thereof.

“*Tender Agent*” shall have the meaning assigned to the term “2008 Series A Tender Agent” in the Supplemental Indenture. On the Closing Date the Tender Agent is U.S. Bank National Association.

“*Tender Agent Agreement*” shall have the meaning assigned to the term “2008 Series A Tender Agent Agreement” in the Supplemental Indenture. For avoidance of doubt, on the Closing Date, references to the Tender Agent Agreement shall be deemed references to the Supplemental Indenture.

“*Term Loan Commencement Date*” means the date which is the earlier of (i) the date which is one hundred eighty (180) days following the date of such Principal Purchase Drawing and (ii) the Stated Expiration Date.

“*Term Loan Rate*” means, for each date of determination, a fluctuating rate per annum equal to the Base Rate *plus* 1.00%; *provided, however* that immediately and automatically upon the occurrence of an Event of Default (and without any notice given with respect thereto) and

during the continuance of such Event of Default, the “*Term Loan Rate*” shall mean the Default Rate.

“*Termination Date*” shall have the meaning assigned to such term in the Letter of Credit.

“*Termination Fee*” shall have the meaning assigned to such term in the Fee Letter.

“*Third Phase Agreement*” means that certain Agreement for Construction, Operation and Financing of the North Fork Stanislaus River Hydroelectric Development Project, dated as of September 1, 1982, by and among NCPA and the Project Participants, as the same may be amended and supplemented from time to time, which is defined as the “Hydroelectric Project Member Agreement” in the Indenture.

“*Trust Estate*” shall have the meaning assigned to such term in the Indenture.

“*Trustee*” means U.S. Bank National Association, or its permitted successor as trustee under the Indenture.

“*U.S. Bankruptcy Code*” means Title 11 of the United States Code, and any successor legislation.

“*United States*” and “*U.S.*” means the United States of America.

“*Weekly Rate*” shall have the meaning assigned to such term in the Indenture.

“*Written*” or “in writing” means any form of written communication or a communication by means of facsimile device.

Section 1.02. Incorporation of Certain Definitions by Reference. Each capitalized term used herein and not otherwise defined herein shall have the meaning provided therefor in the Indenture and the Bonds, as applicable, unless the context otherwise requires.

Section 1.03. Accounting Matters. All accounting terms used herein without definition shall be interpreted in accordance with GAAP, and except as otherwise expressly provided herein all accounting determinations required to be made pursuant to this Reimbursement Agreement shall be made in accordance with GAAP.

Section 1.04. Computation of Time Periods. In this Reimbursement Agreement, in the computation of a period of time from a specified date to a later specified date, unless otherwise specified herein, the word “from” means “from and including” and the words “to” and “until” each mean “to but excluding.”

Section 1.05. New York City Time Presumption. All references herein to times of the day shall be presumed to refer to New York City time unless otherwise specified.

Section 1.06. Relation to Other Documents. Nothing in this Reimbursement Agreement shall be deemed to amend, or relieve NCPA of any of its obligations under, any Related Document. To the extent any provision of this Reimbursement Agreement conflicts with any provision of any other Related Document to which NCPA and the Bank are parties, the provisions of this Reimbursement Agreement shall control as between NCPA and the Bank.

Section 1.07. Interpretation. All words used herein shall be construed to be of such gender as the circumstances require. Unless the context of this Reimbursement Agreement otherwise clearly requires, references to the plural include the singular, the singular includes the plural and the part includes the whole. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include”, “includes” and “including” shall be deemed to be followed by the phrase “without limitation.” The word “will” shall be construed to have the same meaning and effect as the word “shall.” Unless otherwise specified (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth in such document or herein), (b) any reference herein to any Person shall be construed to include such Person’s permitted successors and assigns, (c) the words “herein”, “hereof” and “hereunder”, and words of similar import, shall be construed to refer to this Reimbursement Agreement in its entirety and not be limited to any particular provision of this Reimbursement Agreement, (d) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Reimbursement Agreement and (e) the words “asset” and “property” shall be construed to have the same meaning and effect and, when used in connection with any Person, to refer to all rights, title and interests of such Person in and to any and all property whether real, personal or mixed, or tangible or intangible, and wherever situated, including cash, securities, investment property, accounts, land, buildings, general intangibles, chattel, intellectual property, contract rights and other property and assets.

ARTICLE II

REIMBURSEMENT, BANK BONDS, FEES AND PAYMENT PROVISIONS

Section 2.01. Reimbursement of Drawings. NCPA agrees to pay to the Bank an amount equal to all amounts drawn under the Letter of Credit pursuant to a Principal Drawing, a Principal Purchase Drawing, an Interest Drawing or an Interest Purchase Drawing, which payment shall be due and owing without any requirement of notice or demand by the Bank, on the day on which such Drawing is paid by the Bank; *provided, however*, if on the date of any Principal Purchase Drawing the conditions set forth in Section 3.02(a) hereof are satisfied, NCPA shall not be required to pay to the Bank an amount equal to such Principal Purchase Drawing on such date but shall be required to pay to the Bank with respect to such Principal Purchase Drawing the following:

- (a) To the extent not earlier required to be repaid hereunder, NCPA shall pay to the Bank on the Term Loan Commencement Date an amount equal to the sum of the amount of such Principal Purchase Drawing and any accrued interest thereon, which

payment shall be due and owing without any requirement of notice or demand by the Bank; *provided, however*, that if the conditions set forth in Section 3.02(b) hereof are satisfied on the Term Loan Commencement Date, NCPA shall pay, or cause to be paid, to the Bank the amount of such Principal Purchase Drawing as set forth in Section 2.01(b) below. If NCPA does not make such reimbursement on such date and the conditions set forth in Section 3.02(b) hereof are not satisfied on the Term Loan Commencement Date, the Reimbursement Obligation of NCPA shall bear interest at the Default Rate, payable on demand.

(b) NCPA shall pay to the Bank, which payment shall be due and owing without any requirement of notice or demand by the Bank, the outstanding principal amount of each such Principal Purchase Drawing in six (6) equal consecutive semiannual principal installments over a three (3) year period commencing on the Term Loan Commencement Date and continuing on the first Business Day of each sixth (6th) calendar month thereafter until payment in full of the Principal Purchase Drawing with the final semiannual principal installment in an amount equal to the entire then outstanding principal amount of such Principal Purchase Drawing due and payable on the Amortization End Date, together with interest as described in Section 2.01(c) below. NCPA may prepay the amount of a Principal Purchase Drawing at any time in Authorized Denominations. NCPA's obligations to repay each Principal Purchase Drawing and to pay interest thereon as provided herein shall be evidenced and secured by the Bank Bonds, and Bank Bonds shall be subject to mandatory redemption on the dates (each a "*Bank Bond Redemption Date*") and in principal amounts equal to the amounts required to be paid pursuant to this Section 2.01. Principal actually received by the Bank in the repayment of Bank Bonds shall be credited to the payment of principal owed pursuant to this Section 2.01.

(c) NCPA shall pay to the Bank interest on any and all amounts drawn under the Letter of Credit pursuant to a Principal Purchase Drawing, such interest to accrue from the date of such Drawing until payment thereof in full, payable on the first Business Day of each month or, if earlier, the date on which all or a portion of such principal amount is repaid, to the extent of such principal repayment, at a fluctuating interest rate per annum equal to the Bank Rate from time to time in effect. Interest actually received by the Bank on Bank Bonds shall be credited to the payment of interest owed pursuant to this Section 2.01. For the avoidance of doubt, Bank Bonds shall bear interest at the Bank Rate.

In any event, an amount equal to any Interest Drawing, Interest Purchase Drawing or Principal Drawing shall be due and payable by NCPA to the Bank on the date of any such Drawing.

Section 2.02 Default Interest. NCPA agrees to pay to the Bank, upon demand, interest on any and all amounts owed by NCPA under this Reimbursement Agreement from the earlier of (a) the date such amounts are due and payable but not paid until payment thereof in full and (b) a date on which a default occurs, at a fluctuating interest rate per annum equal to the Default Rate.

The obligations of NCPA under this Section 2.02 shall survive the termination of this Reimbursement Agreement.

Section 2.03. Bank Bonds. (a) NCPA and the Bank agree that, pursuant to the Indenture, the Bank shall become the Owner of any Bonds purchased with the proceeds of a draw on the Letter of Credit and such Bonds shall be registered in the name of the Bank or its designee and made available for delivery to the Bank at the principal office of the Trustee and, prior to such delivery, shall be held in trust by the Trustee for the benefit of the Bank, pursuant to the terms of the Custody Agreement. NCPA agrees to comply, and to use its best efforts to cause the Trustee to comply, with these provisions and those in the Supplemental Indenture regarding Bank Bonds. Bank Bonds shall be assigned the Bank Bond CUSIP Number and shall be held in book-entry form with The Depository Trust Company (“DTC”) in accordance with this Reimbursement Agreement, the Custody Agreement and the Indenture until the Trustee has received written notice from the Bank that the Bank has been paid amounts owed with respect to the Bank Bonds and the Original Stated Amount has been reinstated as provided in the Letter of Credit. NCPA and the Bank hereby agree that the Bank Bonds shall be held as additional security for the payment and performance of NCPA’s obligations hereunder and should it be determined that NCPA has any right, title or interest in or to any Bank Bond, NCPA hereby assigns to the Bank any and all of its right, title and interest in and to the Bank Bonds and the proceeds thereof as security for its obligations hereunder. All costs and expenses related to activities taken pursuant to this Section 2.03(a) or otherwise to register Bank Bonds or transfer legal or beneficial interests therein shall be borne by NCPA.

(b) It is expressly understood and agreed by NCPA that during such time as each Bank Bondholder is the Owner of any Bank Bond, such Bank Bondholder shall have all rights granted to Owners under the Indenture (other than the right to be paid from amounts drawn under the Letter of Credit) as well as any additional rights as may be granted to the Bank Bondholder hereunder or under any of the Related Documents.

(c) NCPA shall cause the Remarketing Agent to use its best efforts to remarket Bank Bonds at a price, together with amounts paid by NCPA to the Bank, equal to the amount of the Principal Purchase Drawing, the proceeds of which were used to purchase such Bank Bonds, plus accrued interest as provided in Section 2.01(b).

(d) The Bank expressly reserves the right to sell, at any time, Bank Bonds, subject, however, to the express terms of this Reimbursement Agreement. The Bank agrees that such sales (other than sales made pursuant to Section 2.03(f)) will be made only to institutional investors or other entities or individuals which customarily purchase commercial paper or tax-exempt securities in large denominations and only upon the receipt of an investment letter from any such purchaser representing the same. The Bank agrees to notify NCPA, the Trustee and the Remarketing Agent promptly of any such sale (other than a sale made pursuant to Section 2.03(f)) and, if such Bank Bond is held in book-entry form, specifying the account at DTC to which such Bank Bond is credited; and to notify the transferee in writing that such Bond is an Ineligible Bonds so long as it remains a Bank Bond and that there may not be a short-term investment rating assigned to such Bond so long as it remains a Bank Bond. Any Bank Bondholder purchasing a Bank Bond from the Bank shall be deemed to have agreed if such Bank

Bond is held in book-entry form, to give all notices in the manner and by the time required by DTC to identify such Bank Bond as an Ineligible Bonds while it remains a Bank Bond.

(e) Prior to 12:00 noon (New York time) on any Business Day on which a Bank Bondholder holds Bank Bonds, the Remarketing Agent may deliver a notice (a “*Purchase Notice*”) through DTC, with a copy to the Bank, stating that it has located a purchaser (the “*Purchaser*”) for some or all of such Bank Bonds in an Authorized Denomination and that such Purchaser desires to purchase on the second Business Day (a “*Sale Date*”) following the Business Day on which a Bank Bondholder receives, prior to 12:00 noon New York time, a Purchase Notice at a price equal to the principal amount thereof plus interest as determined by the Remarketing Agent pursuant to the Indenture (the “*Sale Price*”).

(f) A Bank Bondholder shall decide whether to sell any Bank Bonds to any Purchaser and shall give notice of such decision to the Trustee and the Remarketing Agent by 2:00 p.m. New York time, on the Business Day preceding the Sale Date. In the event such notice is not timely delivered by a Bank Bondholder, such Bank Bondholder shall be deemed to have determined to sell such Bank Bonds to a Purchaser on the Sale Date (subject to receipt by it of the funds called for by the next following sentence). If a Bank Bondholder determines, or is deemed to have determined, to sell such Bank Bonds to a Purchaser, such Bank Bondholder shall deliver such Bank Bonds to the Trustee (or, in the case of Bank Bonds which are held in book-entry form, shall cause the beneficial ownership thereof to be credited to the account of the Remarketing Agent) at DTC by 10:00 a.m. (New York time) on the Sale Date against receipt of the Sale Price therefor in immediately available funds at the Bank Bondholder’s address listed in the Bond Register or such other address as specified by the Bank Bondholder, and such Bonds shall thereupon no longer be considered Bank Bonds. When Bank Bonds are purchased in accordance with this Section 2.03(f), the Trustee shall, upon receipt of such Bank Bonds and upon receipt by such Bank Bondholder of the Sale Price, notify NCPA that such Bonds are no longer Bank Bonds. On the Sale Date, the Differential Interest Amount of such Bonds shall be paid to the Bank Bondholder by NCPA. Any sale of a Bank Bond pursuant to this Section 2.03 shall be without recourse to the seller and without representation or warranty of any kind. If a Bank Bondholder notifies the Trustee and the Remarketing Agent, as provided in the first sentence of this Section 2.03(f), that it will not sell its Bank Bonds, the Trustee shall notify NCPA, the Remarketing Agent, the Bank and such Bank Bondholder that as of the Sale Date such Bond or Bonds shall no longer constitute Bank Bonds or Ineligible Bonds and such Bonds shall be deemed to have been remarketed and the Bank agrees that the Original Stated Amount shall be appropriately increased on the Sale Date and such Bonds shall bear interest at the same rate as Bonds that are not Bank Bonds.

(g) If an Event of Default shall have occurred, the Bank Bondholders may, without notice, exercise all rights, privileges or options pertaining to any Bank Bonds as if it were the absolute owner thereof, upon such terms and conditions as it may determine, all without liability except to account to NCPA for property actually received by the Bank Bondholder. In addition to the rights and remedies granted to it in this Reimbursement Agreement, the Bank Bondholders or its designated agent shall have authority to exercise all rights and remedies of a secured party under the Uniform Commercial Code as in effect in the State. NCPA shall be liable to the Bank Bondholder for the deficiency if the proceeds of any sale or other disposition of the Bank Bonds

are insufficient to pay all amounts to which the Bank Bondholders are entitled. The Bank Bondholders shall have no duty to exercise any such rights, privileges or options and shall not be responsible for any failure to do so or any delay in so doing.

(h) NCPA further agrees to do or consent to be done all such other reasonable acts and things as may be necessary to make any disposition or sale of any portion or all of the Bank Bonds permitted by this Reimbursement Agreement valid and binding and in compliance with any and all applicable laws, regulations, orders, writs, injunctions, decrees or awards of any and all courts or Governmental Authorities having jurisdiction over any such disposition or sales, all at NCPA's expense.

Section 2.04. Fees. NCPA hereby agrees to pay and perform the obligations provided for in the Fee Letter, including, without limitation, the payment of any and all fees, expenses and other amounts provided for therein, at the times and in the amounts set forth in the Fee Letter. Without limiting the generality of the foregoing, in the event that the Letter of Credit is terminated or the Original Stated Amount is reduced and is not subject to reinstatement, NCPA shall pay to the Bank the Termination Fee and/or Reduction Fee, if any, at the times and in the amounts set forth in and as required by the Fee Letter. The terms and provisions of the Fee Letter are hereby incorporated herein by reference as if fully set forth herein. All references to amounts or obligations due under this Reimbursement Agreement shall be deemed to include all amounts and obligations (including without limitation fees and expenses) under the Fee Letter. All fees paid under this Reimbursement Agreement and the Fee Letter shall be fully earned when due and nonrefundable when paid.

Section 2.05. Costs, Expenses and Taxes. (a) NCPA agrees to pay on demand all costs and expenses in connection with the preparation, execution, delivery and administration of this Reimbursement Agreement, the Fee Letter and the other Related Documents and any other documents which may be delivered in connection with this Reimbursement Agreement, the Fee Letter and the other Related Documents, including, without limitation, the reasonable fees and out-of-pocket expenses of counsel for the Bank with respect thereto (including the fees of counsel to the Bank, in the amount set forth in the Fee Letter plus out-of-pocket expenses of such counsel) and with respect to advising the Bank as to its rights and responsibilities under this Reimbursement Agreement, the Fee Letter and the other Related Documents and all costs and expenses, if any, in connection with the enforcement of its rights under this Reimbursement Agreement. the Fee Letter and the other Related Documents and such other documents which may be delivered in connection with this Reimbursement Agreement.

(b) In addition, NCPA shall pay any and all stamp and other taxes and fees payable or determined to be payable in connection with the execution, delivery, filing and recording of this Reimbursement Agreement, the Fee Letter and the other Related Documents and such other documents and agrees to save the Bank harmless from and against any and all liabilities with respect to or resulting from any delay in paying or omission to pay such taxes and fees.

(c) If any payments to the Bank under this Reimbursement Agreement are made from outside the United States, NCPA will not deduct any foreign taxes from any payments it makes to the Bank. If any such taxes are imposed on any payments made by NCPA (including

payments under this paragraph), NCPA will pay the taxes and will also pay to the Bank, at the time interest is paid, any additional amount which the Bank specifies as necessary to preserve the after-tax yield the Bank would have received if such taxes had not been imposed. As soon as practicable after any payment of taxes by NCPA to a Governmental Authority, as provided in this Section 2.05(c), NCPA, will deliver to the Bank the original or a certificate copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of any return reporting such payment or other evidence of such payment reasonably satisfactory to the Bank. NCPA will confirm that it has paid the taxes by giving the Bank official tax receipts (or notarized copies) within thirty (30) days after the due date. All of NCPA's obligations under this Section 2.05 shall survive termination of this Reimbursement Agreement, the cancellation of the Letter of Credit and the repayment, satisfaction or discharge of all other Obligations.

Section 2.06. Increased Costs.

(a) *Increased Costs Generally.* If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, the Bank;

(ii) subject any Recipient to any taxes on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on the Bank or the London interbank market any other condition, cost or expense affecting this Reimbursement Agreement, the Fee Letter or the Letter of Credit or any participation therein;

and the result of any of the foregoing shall be to increase the cost to the Bank of participating in, issuing or maintaining the Letter of Credit, or to reduce the amount of any sum received or receivable by the Bank hereunder (whether of principal, interest or any other amount) then, upon request of the Bank, NCPA will pay to the Bank such additional amount or amounts as will compensate the Bank for such additional costs incurred or reduction suffered.

(b) *Capital Requirements.* If the Bank determines that any Change in Law affecting the Bank or the Bank's holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on the Bank's capital or liquidity, as a consequence of this Reimbursement Agreement, the Fee Letter or the Letter of Credit issued by the Bank, to a level below that which the Bank could have achieved but for such Change in Law (taking into consideration the Bank's policies and the policies of the Bank's holding company with respect to capital adequacy), then from time to time NCPA will pay to the Bank such additional amount or amounts as will compensate the Bank for any such reduction suffered.

(c) *Certificates for Reimbursement.* A certificate of the Bank setting forth the amount or amounts necessary to compensate the Bank, as specified in subsection (a) or (b) of this Section and delivered to NCPA shall be conclusive absent manifest error. NCPA shall pay the

Bank the amount shown as due on any such certificate within thirty (30) days after receipt thereof.

(d) *Delay in Requests.* Failure or delay on the part of the Bank to demand compensation pursuant to the foregoing provisions of this Section shall not constitute a waiver of the Bank's right to demand such compensation; provided that NCPA will have no liability to the Bank for any increased costs, increased capital or reduction in return to the extent incurred by the Bank more than ninety (90) days prior to the date the above-described certificate is given to NCPA; except in the event that the Change of Law giving rise to such increased costs, increased capital or reduction in return is applied on a retroactive basis then the ninety (90) day period referred to in this paragraph shall be extended to include the period of retroactive effect thereof.

(e) *Survival.* All of NCPA's obligations under this Section 2.06 shall survive termination of this Reimbursement Agreement, the cancellation of the Letter of Credit and the repayment, satisfaction or discharge of all other Obligations.

Section 2.07. Method and Application of Payments. (a) All computations of fees payable under this Reimbursement Agreement and the Fee Letter shall be made on the basis of a three hundred sixty (360) day year and actual days elapsed. All computations of interest payable under this Reimbursement Agreement (including interest with respect to Bank Bonds) shall be computed on the basis of a year of 365 or 366 days, as applicable, and actual days elapsed. All payments by or on behalf of NCPA to the Bank hereunder shall be fully earned when due and nonrefundable when paid (barring manifest error in the calculation of the amount of such payments) and made in lawful currency of the United States and in immediately available funds. Amounts payable to the Bank hereunder shall be transferred to the Bank's account as set forth in the Fee Letter (or to such other account of the Bank as the Bank may specify by written notice to NCPA or the Trustee) not later than 3:30 p.m. New York, New York time, on the date payment is due. Any payment received by the Bank after 3:30 p.m., New York, New York time, shall be deemed to have been received by the Bank on the next Business Day. If any payment hereunder is due on a day that is not a Business Day, then such payment shall be due on the next succeeding Business Day, and, in the case of the computation of the interest or fees hereunder, such extension of time shall, in such case, be included in the computation of the payment due hereunder.

(b) Payments received by the Bank pursuant to this Reimbursement Agreement shall be applied first, to payment of fees, indemnities, expenses and other amounts (including fees, charges and disbursements of counsel to the Bank and amounts payable under Section 2.06) payable to the Bank, second, to payment of accrued and unpaid interest on any Drawing or other amount unpaid hereunder or on the Bank Bonds (and, in any such case, first to past due interest and second to current interest), and third, to payment of unpaid principal of any Drawing or the Bank Bonds.

Section 2.08. Maintenance of Accounts. The Bank shall maintain in accordance with its usual practice an account or accounts evidencing the amounts payable and paid from time to time by NCPA hereunder. In any legal action or proceeding in respect of this Reimbursement Agreement, the entries made in such account or accounts shall be rebuttably presumed to be

correct evidence of the existence and amounts of the obligations of NCPA therein recorded. The failure to record any such amount shall not, however, limit or otherwise affect the obligations of NCPA hereunder to repay all amounts owed hereunder, together with all interest accrued thereon as provided herein.

Section 2.09. Payments. All payments to the Bank or any Participant of principal, interest and any other sums due hereunder shall be made in the amounts required hereunder without any reduction or setoff, notwithstanding the assertion of any right of recoupment or setoff or of any counterclaim by NCPA.

Section 2.10. Maximum Rate. (a) If the amount of interest payable for any period in accordance with terms hereof exceeds the amount of interest that would be payable for such period had interest for such period been calculated at the Maximum Rate, then interest for such period shall be payable in an amount calculated at the Maximum Rate for such period.

(b) Any interest that would have been due and payable for any period but for the operation of Section 2.10(a) shall accrue and be payable as provided in this paragraph (b) and shall, less interest actually paid to the Bank for such period, constitute the “*Excess Interest Amount.*” If there is any accrued and unpaid Excess Interest Amount as of any date then the principal amount with respect to which interest is payable shall bear interest at the Maximum Rate, until the earlier of repayment of such principal or payment to the Bank of the entire Excess Interest Amount.

(c) Notwithstanding the foregoing, on the date on which no principal amount hereunder remains unpaid, NCPA shall pay to the Bank a fee equal to any accrued and unpaid Excess Interest Amount.

Section 2.11. Prepayment. Any amounts from time to time owing to the Bank pursuant to Section 2.01 may be prepaid at any time by or on behalf of NCPA. Upon payment to the Bank of any such prepayment the Bank shall apply such payment as provided in Section 2.07. To the extent that such prepayment is applied to the payment of amounts described in Section 2.01(a) the Bank shall transfer to NCPA (or to the Trustee or to such other party as shall make payment to the Bank) a principal amount of Bank Bonds, if any; *provided, however,* that if the prepayment is less than the minimum Authorized Denomination, Bank Bonds shall be released only at such time as prepayments accumulate to the minimum Authorized Denomination then available, and *provided* that, prior to such release of Bank Bonds, NCPA shall have paid to the Bank all amounts owing in respect of any Interest Purchase Drawing paid with respect to the Bank Bonds so released.

Section 2.12. Security. The obligation of NCPA with respect to the payment of all Obligations pursuant to this Reimbursement Agreement and the Indenture are special, limited obligations of NCPA which (a) in the case of all amounts due on any Reimbursement Obligation, are payable from and secured by (i) a pledge and assignment of the Trust Estate (including NCPA Revenues) and all funds and accounts pledged to repayment of the Bonds and all Parity Debt, all as more fully set forth in the Indenture, and (ii) all right, title and interest of NCPA in, to and under the Third Phase Agreement and the Power Purchase Contract, (b) in the case of the

Letter of Credit Fees and the other fees payable by NCPA pursuant to the Fee Letter and Section 2.04 of this Reimbursement Agreement, said Letter of Credit Fees and such other fees shall be deemed to be NCPA Operating Expenses under the Indenture and the Supplemental Indenture and, as such, are payable from the amounts on deposit in the Operating Fund (as defined in and maintained pursuant to the Indenture) and the other amounts which shall become available for such purposes pursuant to the Indenture and (c) all other Obligations of NCPA under this Reimbursement Agreement (other than those described in clauses (a) and (b) of this Section 2.12) shall be payable from the General Account of the General Reserve Fund (as both of such terms are defined and used in the Indenture).

Section 2.13. Reductions in and Termination of Original Stated Amount. The Original Stated Amount may be permanently reduced from time to time or terminated by NCPA upon not less than thirty (30) days' prior written notice (or such shorter notice as shall be acceptable to the Bank) of such reduction or termination given by NCPA to the Bank; provided, that each such reduction shall be in an amount equal to the lesser of (i) \$1,000,000 or any integral multiple of \$100,000 in excess thereof and (ii) the aggregate amount of principal and interest payable at maturity or upon purchase for the Bonds then Outstanding; and provided further that any such reduction shall not cause the Original Stated Amount to be less than the aggregate amount of principal and interest payable at maturity or upon purchase for the Bonds then Outstanding. Notwithstanding any provisions of this Reimbursement Agreement to the contrary, NCPA agrees not to terminate or replace this Reimbursement Agreement or the Letter of Credit or permanently reduce the Original Stated Amount, except upon (i) the payment by NCPA to the Bank of a Termination Fee or Reduction Fee, as applicable, if any, in the amount set forth in the Fee Letter, (ii) the payment to the Bank of all Obligations payable hereunder and (iii) NCPA providing the Bank with not less than sixty (60) days prior written notice of its intent to terminate this Reimbursement Agreement and the Letter of Credit or permanently reduce the Original Stated Amount; *provided* that all payments to the Bank referred to in clause (i) and (ii) above shall be made in immediately available funds; *provided further, however*, that any such termination of this Reimbursement Agreement or the Letter of Credit or the permanent reduction of the Original Stated Amount shall be in compliance with the terms and conditions of the Indenture and the Letter of Credit. NCPA agrees that any termination of the Letter of Credit as a result of the provision of any Alternate Credit Facility or Alternate Liquidity Facility will require, as a condition thereto, that NCPA or the issuer of any Alternate Credit Facility or Alternate Liquidity Facility will provide funds on the date of such termination or provision, which funds will be sufficient to pay in full at the time of termination of such Letter of Credit all Obligations due and owing to the Bank hereunder and under the Fee Letter.

ARTICLE III

CONDITIONS PRECEDENT

Section 3.01. Closing Conditions. As a condition precedent to the issuance of the Letter of Credit, the Bank shall have received the following items on or before the Closing Date, each in form and substance satisfactory to the Bank and its counsel:

(a) A true and complete original executed counterpart of this Reimbursement Agreement, the Fee Letter and the Custody Agreement.

(b) Certified copies of the resolutions of NCPA approving this Reimbursement Agreement and the other matters contemplated hereby (which certificate shall state that such resolutions are in full force and effect on the Closing Date), and certified copies of the Related Documents and NCPA's Organizational Documents.

(c) Originals (or copies certified to be true copies by NCPA) of all Governmental Approvals, if any, at the time necessary for NCPA to execute, deliver and perform this Reimbursement Agreement and the transactions contemplated hereby, together with a list of any required approvals still to be received, if any.

(d) A certificate of NCPA certifying the names and true signatures of the officers of NCPA authorized to sign this Reimbursement Agreement, the Fee Letter, the other Related Documents to be executed on the Closing Date and the other agreements, certificates, instruments and documents to be delivered by it on the Closing Date hereunder and under the Related Documents.

(e) (i) An opinion of NCPA's General Counsel, dated the Closing Date and addressed to the Bank and covering such matters relating to the transactions contemplated hereby as the Bank may reasonably request, including, without limitation, that all necessary action on the part of NCPA shall have been taken to assign and pledge the Trust Estate for the benefit of the Bank and the owners of the Bonds and such pledge is valid, binding and enforceable against NCPA, and that such pledge is the most senior pledge of the Trust Estate in terms of priority of payment and (ii) an opinion of Norton Rose Fulbright US, LLP, bond counsel, dated the Closing Date and addressed to the Bank covering such matters as the Bank may reasonably request.

(f) A copy certified on the Closing Date by NCPA of each of the Related Documents which were executed and delivered prior to the Closing Date and an executed original of each of the Related Documents executed and delivered on the Closing Date.

(g) A certificate signed by duly authorized officers of NCPA, dated the Closing Date, stating that: (i) the representations and warranties of NCPA contained in Article IV are true and correct on and as of the Closing Date as though made on and as of such date; (ii) no petition by or against NCPA has at any time been filed under the United States Bankruptcy Code or under any similar law; (iii) no Default or Event of Default has occurred and is continuing, or would result from the execution and performance of this Reimbursement Agreement, the Fee Letter or the other Related Documents; (iv) no Material Adverse Effect shall have occurred since June 30, 2018; and (v) the Governing Documents are in full force and effect on the Closing Date.

(h) Payment (or provision for such payment having been made to the satisfaction of the Bank) of the Bank's fees and expenses (including attorney's fees and expenses described in Section 2.05) payable on the Closing Date.

(i) Written confirmation that (i) the Bonds bearing the Investor CUSIP Number have received long-term and short-term credit ratings which are the same as or higher than the long-term and short-term ratings assigned to the Bank and (ii) Bank Bonds bearing the Bank Bond CUSIP Number have been assigned long-term ratings of at least “Baa3” (or its equivalent) by Moody’s or “BBB-“ (or its equivalent) by Fitch).

(j) A certificate of NCPA to the effect that there are no actions, suits or proceedings pending (with service of process accomplished, as applicable) or to their knowledge threatened, against NCPA or its properties before any court or governmental department, commission, board, bureau, agency or instrumentality, which, if determined adversely, could reasonably be expected to result in a Material Adverse Effect.

(k) A copy of NCPA’s Investment Policy and a copy of the audited financial statements for NCPA for the three most recent fiscal years for which such statements are currently available and such financial information, budgets, projections, investment policies and guidelines for permitted investments of NCPA as the Bank may reasonably request;

(l) Such other documents, instruments, approvals and, if requested by the Bank, certified duplicates of executed originals thereof, and opinions as the Bank may reasonably request; and

(m) evidence that provision has been made satisfactory to the Bank for (i) the cancellation and return of the existing letter of credit to Bank of Montreal and (ii) payment in full of all amounts due and owing to Bank of Montreal under the related reimbursement agreement.

Section 3.02. Conditions for Section 2.01. (a) All amounts drawn under the Letter of Credit as a Principal Purchase Drawing are due and payable on the date drawn unless on such date the following conditions are satisfied:

(i) No Event of Default shall have occurred and be continuing;

(ii) No Material Litigation shall be pending;

(iii) No event has occurred and is continuing which has or is having a Material Adverse Effect; and

(iv) All representations and warranties of NCPA made in this Reimbursement Agreement are true and correct as of such date.

(b) All amounts drawn under the Letter of Credit as a Principal Purchase Drawing, to the extent not earlier required to be repaid hereunder, are due and payable on the related Term Loan Commencement Date, in each case unless on such date the following conditions are satisfied:

- (i) No Event of Default shall have occurred and be continuing;
- (ii) No Material Litigation shall be pending;
- (iii) No event has occurred and is continuing which has or is having a Material Adverse Effect; and
- (iv) All representations and warranties of NCPA made in this Reimbursement Agreement are true and correct as of such date.

Section 3.03. Drawings. On the date of any Drawing, NCPA shall be deemed to represent and warrant that (a) no Event of Default has occurred and is continuing; (b) no Material Litigation is pending; (c) no event has occurred and is continuing which has or is having a Material Adverse Effect; and (d) all representations and warranties of NCPA made in this Reimbursement Agreement are true and correct as of the date of such Drawing.

ARTICLE IV

REPRESENTATION AND WARRANTIES

NCPA represents and warrants as follows:

Section 4.01. Existence and Power. NCPA is a joint exercise of powers agency established and validly existing under and pursuant to the laws of the State and has: (a) full power and authority under the laws of the State, to enter into and perform its obligations under this Reimbursement Agreement and the other Related Documents and (b) all material governmental licenses, authorization, consents and approvals required to carry its business as now conducted and to enter into and perform its obligations under this Reimbursement Agreement and the other Related Documents.

Section 4.02. Regulatory Authority. NCPA is duly authorized (a) to conduct its business and activities with respect to the Project and (b) to engage in the transactions and activities described herein and in the Related Documents. NCPA has obtained all Governmental Approvals it is required to obtain in connection with its current operation of the Project, the Bonds, the other Related Documents and this Reimbursement Agreement and all such Governmental Approvals are in full force and effect. No order, consent, approval, license, authorization or validation of, or filing, recording or registration with (except as have been obtained or made prior to the Closing Date, and except for such approvals, consents or orders as may be required under Blue Sky or other securities laws of any state in connection with the remarketing of the Bonds), or exemption by, any governmental or public body or authority, or any subdivision thereof, is required to authorize, or is required in connection with, (i) the execution, delivery and performance by NCPA of this Reimbursement Agreement, the Fee Letter or any Related Document to which NCPA is a party or the Bonds or (ii) the legality, validity, binding effect or enforceability against NCPA of this Reimbursement Agreement, any Related Document to which NCPA is a party, the Bonds or the Governing Documents.

Section 4.03. Noncontravention. The execution and delivery by NCPA of this Reimbursement Agreement, the Fee Letter and the other Related Documents to which it is a party and the performance of its obligations hereunder and thereunder, do not and will not (i) violate any law, rule, regulation, order, writ, judgment, injunction, decree, determination or award presently in effect having applicability to NCPA or the Project or (ii) result in a breach of or constitute a default under any indenture or loan or credit agreement, lease or instrument to which it is a party or by which it or any of its properties relating to the Project is bound.

Section 4.04. Due Authorization. The execution, delivery and performance by NCPA of this Reimbursement Agreement, the Fee Letter and the other Related Documents to which it is a party are within its corporate power and authority, and have been duly authorized by all necessary action, require no action by or in respect of, or filing with, any governmental body, agency or official and will not contravene any provision of the Organizational Documents.

Section 4.05. Valid and Binding Obligations. This Reimbursement Agreement, the Fee Letter and the other Related Documents to which NCPA is a party have been duly executed and delivered by NCPA and constitute the valid and binding obligations of NCPA, enforceable against NCPA in accordance with their respective terms, except as such enforceability may be limited by NCPA's bankruptcy, insolvency, reorganization, moratorium or other laws or equitable principles relating to or limiting creditors' rights generally and by limitations on remedies available against public agencies such as NCPA in the State. The Joint Powers Agreement has been duly executed and delivered by NCPA and constitutes a legal, valid and binding obligation of NCPA and, to the best of NCPA's knowledge, each Member Government, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other laws or equitable principles relating to or limiting creditors' rights generally and by limitations on remedies available against public agencies such as NCPA in the State. The Facilities Agreement and the Third Phase Agreement each constitute a legal, valid and binding obligation of NCPA and, to the best of NCPA's knowledge, each Project Participant which is a party to the Facilities Agreement or the Third Phase Agreement, as applicable, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other laws or equitable principles relating to or limiting creditors' rights generally and by limitations on remedies available against public agencies such as NCPA in the State. Each of the Related Documents and the Governing Documents are or will be on the Closing Date in full force and effect.

Section 4.06. Remarketing Memorandum. The information contained in the Remarketing Memorandum is correct in all material respects and does not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements made therein, in light of the circumstances under which they were made, not misleading. NCPA makes no representation as to (a) information in the Remarketing Memorandum relating to the Bank and provided by the Bank for inclusion therein and (b) provisions in the Remarketing Memorandum relating to DTC and procedures relating to book-entry securities.

Section 4.07. Pending Litigation and Other Proceedings. No action, suit or proceeding of or before any court or other Governmental Authority is pending (with service of process accomplished, as applicable) or, to the knowledge of NCPA, threatened, affecting or involving

(i) the Project or relating to the NCPA Revenues, (ii) the validity or enforceability of the Bonds or any of the Related Documents or the Governing Documents or the validity of any proceeding held or action taken by NCPA in connection with the execution and delivery of this Reimbursement Agreement or any of the Related Documents or the Governing Documents, (iii) affecting the existence of NCPA, the titles of its officers to their respective offices or the Project or the ability of NCPA to fix charges under the Third Phase Agreement or pledge the Trust Estate pursuant to the Indenture, (iv) the exclusion of interest on the Bonds from gross income for federal income tax purposes or (v) in any way the completeness or accuracy of the Remarketing Memorandum or any supplement or amendment thereto which, in each case, if adversely determined, would have a Material Adverse Effect (any such action or proceeding being herein referred to as "*Material Litigation*").

Section 4.08. Insurance. With respect to the Project, NCPA currently maintains insurance of such type and in such amounts or in excess of such amounts as are customarily carried by, and insures against such risks as are customarily insured against by, businesses of like type, size and character to the Project.

Section 4.09. Financial Statements. The combined statements of net position of NCPA as of June 30, 2018, and the related statement of revenues and expenses and changes in net position for the year then ended and the auditors' reports with respect thereto, copies of which have heretofore been furnished to the Bank, are complete and correct and fairly present the financial condition, changes in financial position and results of operations of NCPA at such dates and for such periods, and were prepared in accordance with GAAP, in each case relating to the Project. Since June 30, 2018, no event has occurred and is continuing which would have a Material Adverse Effect nor has there been any material adverse change in NCPA's financial condition or any increase in its long-term debt, in each case relating to the Project, that has not been disclosed in the Remarketing Memorandum.

Section 4.10. Correct Information. All information, reports and other papers and data with respect to NCPA furnished to the Bank or its counsel by NCPA were, taken in the aggregate and at the time the same were so furnished, true, complete and correct in all material respects. There is no fact known to NCPA which NCPA has not disclosed to the Bank in writing and which materially adversely affects or, so far as NCPA can now reasonably foresee, is likely to materially adversely affect the ability (financial or otherwise) of NCPA to repay when due the Obligations or to perform its obligations under the Related Documents to which NCPA is a party or the Governing Documents.

Section 4.11. Pending Legislation and Decisions. To the knowledge of NCPA, no amendment to the Constitution of the State or any State law has passed either house of the legislature of the State, or been favorably reported by a committee of the applicable legislative house, nor does any final reported appellate judicial decision interpreting the Constitution of the State or any State law exist, the effect of which will, in the reasonable opinion of NCPA, materially adversely affect the security for the Bonds or NCPA's obligations hereunder or under any of the Related Documents or the Governing Documents, the creation, organization, or existence of NCPA or the titles to office of any officers executing this Reimbursement Agreement or any Related Documents to which NCPA is a party, or NCPA's ability to repay

when due its obligations under this Reimbursement Agreement, the Bonds, and the Related Documents.

Section 4.12. Bonds. Each Bond (including all Bank Bonds) has been or will be duly and validly issued under the Act and the Indenture and entitled to the benefits thereof.

Section 4.13. Default. No Default or Event of Default has occurred and is continuing hereunder. No “default” or “event of default” under, and as defined in, the Indenture or any of the other Related Documents has occurred and is continuing. NCPA is not presently in default under any material agreement to which it is a party which could reasonably be expected to have a Material Adverse Effect and no petition by or against NCPA has at any time been filed under the United States Bankruptcy Code or any similar federal or State statute. NCPA is solvent and able to pay its debts as they become due. NCPA is not in violation of any material term of the Organizational Documents or any material term of any bond indenture or agreement to which it is a party or by which any of its property or assets is bound.

Section 4.14. Bank Bonds. The Bank Bonds will be transferred to or held for the benefit of the Bank, free and clear of all liens, security interests or claims of any Person other than the Bank, except for consensual liens or other security interests as may be created by the Bank.

Section 4.15. Incorporation of Representations and Warranties. NCPA hereby makes to the Bank the same representations and warranties made by NCPA in each Related Document to which it is a party, which representations and warranties, together with the related definitions of terms contained therein, are incorporated herein by this reference with the same effect as if each and every such representation and warranty and definition were set forth herein in its entirety. No amendment to or waiver of such representations, warranties or definitions made pursuant to the relevant Related Documents shall be effective to amend such representations and warranties and definitions as incorporated by reference herein without the prior written consent of the Bank.

Section 4.16. Employee Benefit Plan Compliance. Neither NCPA nor any employee benefit plan maintained by NCPA is subject to ERISA. NCPA is in compliance, in all material respects, with its obligations under any Pension Plans.

Section 4.17. Sovereign Immunity. Except as provided by the Government Claims Act (Division 3.6 of Title 1 of the California Government Code commencing with Section 810 et seq.), NCPA, the Project, and the Trust Estate are not exempt or immune from, whether on the basis of sovereign immunity or any similar legal or equitable principle, doctrine or rule of law and whether now or at any time hereafter arising, (1) jurisdiction, (2) relief by way of injunction, order for specific performance or for recovery of property or writ of mandamus (3) liability, suit or other legal or equitable remedy (other than garnishment or attachment of or liens on public property) for the amounts due and payable under the Bonds, this Reimbursement Agreement or any of the other Related Documents or the performance of any of its other obligations hereunder or thereunder, and (4) enforcement of any judgment, order or decree to which NCPA, the Project or the Trust Estate may be made subject.

Section 4.18. Federal Reserve Board Regulations. NCPA will not use any part of the proceeds of the Bonds or the funds advanced under the Letter of Credit and has not incurred any indebtedness to be reduced, retired or purchased by NCPA out of such proceeds, for the purpose of purchasing or carrying any Margin Stock and NCPA does not own and will not acquire any such Margin Stock with the proceeds of the Bonds or funds advanced under the Letter of Credit.

Section 4.19. Investment Company Act. NCPA is not an “investment company” or a company “controlled” by an “investment company,” as such terms are defined in the Investment Company Act of 1940, as amended.

Section 4.20. Trust Estate. All obligations in respect of principal of and interest on the Bonds and all obligations owed to the Bank hereunder (including, without limitation, the obligation to pay all amounts due and owing with respect to the Bank Bonds as provided in this Reimbursement Agreement, and to pay all fees and other amounts payable hereunder) constitute limited obligations of NCPA payable solely from the Trust Estate. Neither the full faith and credit of NCPA, or that of any of its Member Governments or Project Participants, is pledged, nor are any of the Member Governments or Project Participants liable for the payment of any obligations under this Reimbursement Agreement. The Indenture creates a valid pledge upon the NCPA Revenues in favor of the Owners, including without limitation each Bank Bondholder, subject only to those liens provided for in the Indenture. No instrument by which such pledge is created need be recorded or filed in order to perfect such pledge.

Section 4.21. No Limitation on Interest Rate. As of the Closing Date, the laws of the State impose no limitation on the rate of interest payable by NCPA hereunder or in connection with Bank Bonds or the Obligations owing to the Bank hereunder.

Section 4.22. Environmental Laws. NCPA and its assets and property relating to the Project (1) has not become subject to any Environmental Liability nor does NCPA know of any basis for any Environmental Liability (other than the obligation to fund decommissioning costs relating to NCPA’s interest in the Project), (2) has not received notice of any Environmental Claim or of any failure or alleged failure to comply with applicable federal, state or local health and safety statutes or regulations, except for notices of Environmental Claims or of failures or alleged failures to comply that, singly or in the aggregate, have not had or are not anticipated to have a Material Adverse Effect and (3) to the best knowledge of NCPA, is in compliance with all Environmental Laws relating to the Project and has obtained and maintains or complies with any permit, license or other approval required for the Project under any Environmental Law.

Section 4.23. Member Governments; Project Participants. Exhibit C sets forth, as of the Closing Date, all of the Member Governments of NCPA, each Member Government that is a Project Participant and each Project Participant that is a Significant Share Project Participant.

Section 4.24. Tax Exempt Status. NCPA has not taken any action or omitted to take any action, and knows of no action taken or omitted to be taken by any other person or entity, which action, if taken or omitted, would cause interest on the Bonds to be subject to federal income taxes or to personal income taxes levied by the State.

Section 4.25. Permitted Investments. To its knowledge, after due inquiry, NCPA has neither made any investment nor entered into any agreements for the purpose of effecting any investment which are not permitted to it pursuant to the Indenture, the other Related Documents, its Governing Documents or the Investment Policy.

Section 4.26. Taxes. NCPA is not required to file any tax returns. NCPA has paid all property assessments and tax amounts on the Project (other than those the amount or validity of which are currently being contested in good faith by appropriate proceedings and with respect to which appropriate reserves in accordance with GAAP have been provided on the books of NCPA). No tax liens for nonpayment have been filed and, to the best knowledge of NCPA, no claims are being actively asserted with respect to any such taxes, fees or other charges (other than those the amount or validity of which are currently being contested in good faith by appropriate proceedings and with respect to which appropriate reserves in accordance with GAAP have been provided on the books of NCPA).

Section 4.27. Treatment under the Indentures. The Letter of Credit constitutes both the 2008 Series A Credit Facility and the 2008 Series A Liquidity Facility, in each case as defined in the Supplemental Indenture. The 2008 Series A MBIA Insurance Policy was never issued as an Alternate 2008 Series A Credit Facility under the Indenture. This Reimbursement Agreement, together with the Fee Letter, is the 2008 Series A Credit Reimbursement Agreement, the 2008 Series A Reimbursement Agreement and the 2008 Series A Liquidity Reimbursement Agreement under the Indenture. The Bank is the 2008 Series A Credit Provider and the 2008 Series A Liquidity Provider under the Indenture.

Section 4.28. Related Documents to Constitute a Contract and a Legal Obligation. The provisions of the Bank Bonds, this Reimbursement Agreement and the other Related Documents constitute a contract between NCPA and the Bank and the Bondholders, as applicable, and a separate legal obligation of NCPA, and, in each case, such provisions are enforceable, subject to judicial discretion and the availability of legal remedies, by mandamus and any other appropriate suit, action or proceedings at law or in equity in any court of competent jurisdiction.

Section 4.29. Tender Agent and the Remarketing Agent. U.S. Bank National Association (or a successor or assign reasonably satisfactory to the Bank) is the duly appointed and acting Tender Agent and Citigroup Global Markets Inc. (or a successor or assign reasonably satisfactory to the Bank) is the duly appointed and acting Remarketing Agent.

Section 4.30. Sanctions Concerns and Anti-Corruption Laws.

(a) *Sanctions Concerns.* Neither NCPA, nor, to the knowledge of NCPA, any of its directors or officers is (i) currently the subject of any Sanctions, (ii) included on OFAC's List of Specially Designated Nationals, or any similar list enforced by any other relevant sanctions authority or (iii) located, organized or resident in a Designated Jurisdiction.

(b) *Anti-Corruption Laws.* NCPA has conducted its business in compliance with the United States Foreign Corrupt Practices Act of 1977, , and has instituted and maintained policies and procedures designed to promote and achieve compliance with such laws.

(c) In addition, NCPA will cause the proceeds of the Drawings under the Letter of Credit to be used to pay the principal of or interest on the Bonds or the Purchase Price of the Bonds in the event that the Bonds are tendered and not remarketed.

Section 4.31. No Public Vote or Referendum. There is no public vote or referendum concluded, or to the knowledge of NCPA, pending or proposed, in each case, the results of which could reasonably be expected to result in a Material Adverse Effect.

Section 4.32. Interest Rate Protection Agreement. NCPA has not entered into any Interest Rate Protection Agreement relating to Debt (a) wherein any termination payment thereunder is senior to or on a parity with the payment of the Bonds or the other Reimbursement Obligations or (b) which requires NCPA to post cash collateral to secure its obligations thereunder.

Section 4.33. Senior Debt. NCPA has not issued, incurred, assumed or Guaranteed any Debt which is outstanding and is both (i) payable from NCPA Revenues, and (ii) senior, as to the priority of payment or security, to the Bonds. The Bonds, any Bank Bonds, and Reimbursement Obligations of NCPA hereunder, are on a parity as to priority of payment and with respect to the Lien on NCPA Revenues.

Section 4.34. Title to Assets. NCPA has good and marketable title to its assets related to the Project except where the failure to have good and marketable title to any of such assets related to the Project would not have a Material Adverse Effect.

Section 4.35. Labor Matters. NCPA has no knowledge of any existing or threatened strike, walkout or work stoppage by its employees, the result of which could reasonably be expected to result in a Material Adverse Effect.

Section 4.36. Related Documents. The Indenture, the Supplemental Indenture, the Power Purchase Contract, the Third Phase Agreement, the Facilities Agreement and the Joint Powers Agreement, true and correct copies of which NCPA has delivered to the Bank, constitute the essential documents pertaining to the issuance of the Bonds and the security and sources of payment provided under the Indenture therefor.

ARTICLE V

AFFIRMATIVE COVENANTS

So long as the Termination Date has not occurred or any amount is due or owing to the Bank under this Reimbursement Agreement or any Related Document, NCPA shall comply with each of the affirmative covenants contained in this Article V unless the Bank shall have otherwise given its prior written consent:

Section 5.01. Compliance With Laws and Regulations. NCPA shall comply with all laws, ordinances, orders, rules and regulations of duly constituted Governmental Authorities which may be applicable to it, in connection with the Project, or the Project, the failure of which could have a Material Adverse Effect and deliver to the Bank, upon reasonable request as to any

particular law, ordinance order, rule or regulation, satisfactory evidence of such compliance therewith.

Section 5.02. Reporting Requirements. NCPA shall keep proper books of record and account in which full, true and correct entries will be made of all dealings or transactions of or in relation to the business and affairs of NCPA relating to the Project on a consolidated or combined basis in accordance with GAAP consistently applied. NCPA shall furnish to the Bank two copies of each of the following:

(a) *Annual Financial Statements.* As soon as available, and in any event within two hundred seventy (270) days after the close of each Fiscal Year of NCPA, the complete audited financial statements of NCPA, including the statement of net position as of the end of such Fiscal Year, and the related statements of revenues and expenses and changes in net position for such Fiscal Year, setting forth in each case in comparative form the corresponding figures for the preceding Fiscal Year, all in reasonable detail, certified by an independent certified public accountant as having been prepared in accordance with the GAAP, consistently applied, such audit having been conducted in accordance with Generally Accepted Auditing Standards.

(b) *Certificate of Compliance.* Simultaneously with the delivery of each set of financial statements referred to in (a) above, a certificate signed by the General Manager or any other officer of NCPA stating that (i) under his/her supervision NCPA has made a review of its activities during the preceding annual period, as applicable, for the purpose of determining whether or not NCPA has complied in all material respects with the terms, provisions and conditions of this Reimbursement Agreement, the Fee Letter and the other Related Documents and (ii) to the best of his/her knowledge NCPA is not in Default in any material respect in the performance or observance of any of the terms, covenants, provisions or conditions of this Reimbursement Agreement or any of the Related Documents, or if NCPA shall be in Default, such certificate shall specify each such Default or Event of Default, the nature and status thereof and any remedial steps taken or proposed to correct each such Default or Event of Default.

(c) *Other Reports.* Promptly upon request by the Bank, copies of any financial statement or report relating to the NCPA Revenues or the Project furnished to any other holder of the long-term securities of NCPA pursuant to the terms of any long-term indenture, loan or credit or similar agreement and not otherwise required to be furnished to the Bank pursuant to any other clause of this Section 5.02.

(d) *Budget.* As soon as available after adoption but in any event within 60 days after approval of NCPA, a copy of the Annual Budget for each Fiscal Year, prepared pursuant to Section 809 of the Original Indenture, including the budget for the Project for such Fiscal Year, if separate, and any amended Annual Budget prepared pursuant to Section 809 of the Original Indenture.

(e) *Amendments.* Promptly after the adoption or execution and delivery thereof, as applicable, copies of any amendments to the Related Documents, the

Governing Documents, the Indenture (other than any supplement to the Indenture setting forth only the terms of a new series of Parity Debt) or the Remarketing Memorandum.

(f) *Indenture Information.* NCPA shall provide the Bank written notice of any change in the identity of the Trustee, the Paying Agent, the Tender Agent or the Remarketing Agent upon becoming aware of the same.

(g) *Other Information.* Such other information respecting the business, properties or the condition or operations, financial or otherwise, of NCPA affecting the NCPA Revenues or the Project as the Bank may from time to time reasonably request.

(h) *NCPA Revenues.* Upon the request of the Bank, NCPA shall promptly furnish to the Bank information concerning collections of the NCPA Revenues.

(i) *NRMSIR Filings.* Copies of all filings made by NCPA relating to the Bonds or the Project with any Nationally Recognized Municipal Securities Information Repository (including the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System ("EMMA")), including annual reports or event notices (other than routine notices of scheduled redemptions), provided in satisfaction of or as may be required by the provisions of Rule 15c2 12 promulgated pursuant to the Securities Exchange Act of 1934, as amended (17 C.F.R. Sec. 240 15c2 12), or any successor or similar legal requirement promptly after such filings are made.

(j) *Offering Documents.* As soon as possible but, in any event, within thirty (30) days after the issuance thereof, copies of any prospectus, official statement, offering circular, placement memorandum, remarketing circular or similar or corresponding document, and any supplements thereto and updates and amendments thereof, that NCPA makes available in connection with the offering for sale of any securities, relating to the Project, of which it is the issuer.

(k) *Legislation.* Promptly after becoming aware of and having reasonable opportunity to assess the impact thereof, copies of all enacted legislation which, to the best knowledge of NCPA, relates to or impacts upon this Reimbursement Agreement, the Fee Letter, the Letter of Credit, the other Related Documents, the Governing Documents or the ability of NCPA to perform its obligations in connection herewith or therewith and which could reasonably be expected to result in a Material Adverse Effect with respect to such aforementioned documents or obligations.

Section 5.03. Notices.

(a) *Notice of Default.* NCPA shall provide to the Bank, promptly and in any event within five Business Days upon learning thereof, notice by telephone, promptly confirmed in writing, of any Default or Event of Default or any event of default under the Indenture and if such event or condition is then continuing, a certificate of an officer of NCPA setting forth the details thereof and the action which NCPA is taking or proposes to take with respect thereto.

(b) *Litigation and other Notices.* NCPA shall provide to the Bank in writing, promptly and in any event within fifteen Business Days upon learning thereof, notice of:

(i) any Material Litigation and any other action, suit, proceeding, inquiry or investigation relating to the NCPA Revenues or the Project (A) that is commenced or threatened against NCPA or the Project that seeks damages in excess of **[\$10,000,000]** (B) which seeks injunctive relief, (C) which alleges criminal misconduct by NCPA or any officer, employee or agent of NCPA, (D) which alleges the violation of any law regarding, or seeks remedies in connection with, any Environmental Liabilities relating to the Project that singly or in the aggregate could reasonably be expected to exceed \$5,000,000, (E) which challenges the validity or enforceability of the security interest in and the pledge of the Trust Estate (including the NCPA Revenues) or the priority of such pledge and Lien in favor of the Reimbursement Obligations and the security or source of repayment of any of NCPA's other Obligations hereunder over any or all other liabilities and obligations of NCPA as against all Persons having claims of any kind in tort, contract or otherwise, whether or not such Persons shall have notice thereof; and

(ii) any criminal investigation or proceeding by a Governmental Authority with respect to the Project involving NCPA, or any officer or managerial employee of NCPA; written notice of a communication from any labor union of an intent to strike NCPA at a future date with respect to the Project, with such notice to include a description of the action or actions that NCPA propose to take with respect thereto; the proposal of a bill or other legislation or the qualification for the ballot of any initiative or referendum which challenges the validity or enforceability of any of the Related Documents, the Governing Documents or the Act, or otherwise could annul, amend, modify or replace the Governing Documents or the Act or which could lead to a material diminution or reallocation of the NCPA Revenues or any portion thereof; and any material development in any legal proceeding or other action affecting NCPA with respect to the Project which NCPA has, or should have, provided notice of to the Bank pursuant to clause (i) of this Section 5.03(b).

(c) *Certain Notices.* NCPA shall furnish to the Bank (i) promptly upon obtaining knowledge thereof, written notice of the failure by the Remarketing Agent, the Tender Agent or the Trustee to perform any of its respective obligations under any of the Related Documents to which the Remarketing Agent, the Tender Agent or the Trustee, as the case may be, is a party, (ii) promptly upon obtaining knowledge thereof, copies of any communications received from any taxing authority or Rating Agency which are relevant and material to NCPA's representations, warranties and covenants as set forth herein and in any Related Document to which it is a party and (iii) promptly upon obtaining knowledge thereof, each notice required to be given to the Bank pursuant to the Indenture.

(d) *Other Notices.* NCPA shall promptly give written notice to the Bank of any material dispute which may exist between NCPA and any of the Remarketing Agent or the Trustee, Paying Agent, Tender Agent with respect to the Bonds or any dispute in connection with any transaction contemplated under this Reimbursement Agreement or any Related Document.

(e) *Project Participants.* NCPA shall promptly give written notice to the Bank of (i) receipt of any notice of withdrawal of a Project Participant pursuant to Section 15 of the Facilities Agreement, (ii) receipt of any notice of withdrawal of any Member Government pursuant to Article IV, Paragraph 2 of the Joint Powers Agreement, (iii) receipt of any notice of any transfer, sale or assignment by a Project Participant pursuant to Section 9 of the Third Phase Agreement, and (iv) any change in the Project Entitlement Percentage (as defined in the Third Phase Agreement) of any Project Participant.

Section 5.04. Further Assurances. NCPA shall, upon the request of the Bank, from time to time, execute and deliver and, if necessary, file, register and record such further financing statements, amendments, confirmation statements and other documents and instruments and take such further action as may be reasonably necessary to effectuate the provisions of this Reimbursement Agreement, the Fee Letter and the other Related Documents. Except to the extent it is exempt therefrom, NCPA will pay or cause to be paid all filing, registration and recording fees incident to such filing, registration and recording, and all expenses incident to the preparation, execution and acknowledgment of such instruments of further assurance, and all federal or state fees and other similar fees, duties, imposts, assessments and charges arising out of or in connection with the execution and delivery of this Reimbursement Agreement, the Related Documents and such instruments of further assurance. NCPA, to the extent permitted by law, at all times shall defend, preserve and protect the pledge of the Trust Estate under the Indenture against all claims and demands of all persons other than the beneficiaries of such pledge specified in the Indenture.

Section 5.05. Right of Entry. NCPA shall permit the duly authorized representatives of the Bank during normal business hours and upon reasonable notice to, at the expense of the Bank so long as no Default or Event of Default shall have occurred, examine and copy NCPA's financial and corporate books, records and accounts relating to the Project, and to the extent permitted by law, visit the properties of the Project, and to discuss the affairs, finances, business and accounts of NCPA relating to the Project with NCPA's General Manager, Assistant General Manager, Finance and Administrative Services, Assistant General Manager, Generation Services and Treasurer and, with notice to NCPA, its independent auditors (and by this provision, NCPA authorizes said auditors to discuss with the Bank or its representatives the affairs, finances and accounts of NCPA and the Project).

Section 5.06. Payment of Obligations; Removal of Liens. NCPA shall pay (a) all indebtedness and obligations of NCPA payable from the Trust Estate in accordance with the terms thereof and (b) with respect to the Trust Estate or the Project, all assessments or other governmental charges as the same respectively become due, all taxes, assessments (general or special) and governmental charges of any kind whatsoever that may be at any time lawfully assessed or levied against or with respect to the Trust Estate or any interest thereon and promptly discharge or cause to be discharged all Liens, encumbrances and charges on such property and assets, other than, in each case, those diligently contested by NCPA in good faith.

Section 5.07. Related Obligations. NCPA shall promptly pay all amounts payable by it hereunder and under the Related Documents according to the terms hereof or thereof and shall duly perform each and every of its covenants, agreements and obligations under this

Reimbursement Agreement and the other Related Documents and Governing Documents to which it is a party; which provisions, as well as related defined terms contained therein, are hereby incorporated by reference herein with the same effect as if each and every such provision were set forth herein in its entirety without giving effect to any amendment or supplement of the Related Documents or the Governing Documents to which the Bank has not given its express written consent as provided in Section 6.01. To the extent that any such incorporated provision permits NCPA, the holders of one or more Bonds or any other party to waive compliance with such provision or requires that a document, opinion or other instrument or any event or condition be acceptable or satisfactory to NCPA, the holders of one or more Bonds or any other party, for purposes of this Reimbursement Agreement, such provision shall be waived with respect to the Bank only if it is specifically waived by the Bank in writing and such document, opinion or other instrument and such event or condition shall be acceptable or satisfactory with respect to the Bank only if it is acceptable or satisfactory to the Bank which shall only be evidenced by the written approval by the Bank of the same. No termination or amendment to such covenants and agreements or defined terms or release of NCPA with respect thereto made pursuant to the Related Documents or the Governing Documents, shall be effective to terminate or amend such covenants and agreements and defined terms or release of NCPA with respect thereto as incorporated by reference herein without the prior written consent of the Bank. Notwithstanding any termination or expiration of any such Related Document or any such Governing Document, NCPA shall, unless such Related Document or such Governing Document has terminated in accordance with its terms and has been replaced by a new Related Document or new Governing Document, continue to observe the covenants therein contained for the benefit of the Bank until the termination of this Reimbursement Agreement. All such incorporated covenants shall be in addition to the express covenants contained herein and shall not be limited by the express covenants contained herein nor shall such incorporated covenants be a limitation on the express covenants contained herein. To the extent it has the power to do so, NCPA shall take reasonable actions to enforce the terms of the Related Documents applicable to the Trustee, the Tender Agent, the Paying Agent and the Remarketing Agent and to which they are a party.

Section 5.08. Insurance. NCPA will at all times maintain insurance with respect to its business operations and properties relating to the Project against such risks, in such amounts, with such companies and with such deductibles as is customary for business operations and properties of like size, location and character to those of the Project.

Section 5.09. Alternate Credit Facility or Alternate Liquidity Facility. (a) NCPA agrees to use its best efforts to obtain an Alternate Credit Facility and Alternate Liquidity Facility to replace the Letter of Credit or cause the Bonds to be converted to bear interest at interest rate mode that does not require the support of a Credit Facility or Liquidity Facility pursuant to the Indenture if (i) the Bank shall decide not to extend the Stated Expiration Date pursuant to the terms hereof, (ii) the Letter of Credit is terminated, or (iii) the Bank shall furnish notice pursuant to the first paragraph of the Letter of Credit to the Trustee.

(b) NCPA agrees that any Alternate Liquidity Facility or Alternate Credit Facility will require, as a condition to the effectiveness of the Alternate Liquidity Facility or Alternate Credit Facility, as applicable, that the provider of the Alternate Liquidity Facility or Alternate Credit Facility, as applicable, provide funds to the extent necessary, in addition to other funds available,

on the date the Alternate Liquidity Facility or Alternate Credit Facility, as applicable, becomes effective, for the purchase of all Bank Bonds at par plus interest (at the Bank Rate or Default Rate, as applicable) through the date purchased and the payment of all amounts owed under this Reimbursement Agreement and the Fee Letter. On such date NCPA shall pay in full all other amounts due under this Reimbursement Agreement and the Fee Letter (including the Excess Interest Amount and unpaid interest thereon to the extent provided by Section 2.10).

(c) NCPA shall not permit an Alternate Credit Facility or Alternate Liquidity Facility to become effective with respect to less than all of the Bonds without the prior written consent of the Bank.

Section 5.10. Pension Plan Compliance. NCPA shall satisfy all funding obligations under any Pension Plan.

Section 5.11. Disclosure to Participants. NCPA agrees to permit the Bank to disclose any information received by the Bank in connection herewith, including without limitation the financial information described in Section 5.02, to any Participants of the Bank in this Reimbursement Agreement.

Section 5.12. Sovereign Immunity. In connection with any action commenced by the Bank or any other party to a Related Document in connection with this Reimbursement Agreement or any other Related Document, to the fullest extent permitted by applicable law, NCPA agrees that it will not claim any immunity on the grounds of sovereignty or other similar grounds from (i) suit, (ii) jurisdiction of any court, (iii) relief by way of injunction or order for specific performance, or (iv) enforcement of any judgment to which it or its revenues specified in Section 2.12 might otherwise be entitled in any proceedings in the courts of any jurisdiction and irrevocably waives, to the fullest extent permitted by applicable law, with respect to itself and its revenues specified in Section 2.12 (irrespective of their use or intended use), all such immunity, except to the extent provided in the Governmental Claims Act. To the extent that NCPA has or hereafter may acquire under any applicable law any right to immunity from setoff or legal proceedings on the grounds of sovereignty or otherwise, NCPA, to the extent permitted by law, hereby irrevocably: (a) waives such rights to immunity for itself and (b) agrees not to invoke any defense of immunity in respect of its obligations arising under or related to this Reimbursement Agreement, the Fee Letter or any other Related Document.

Section 5.13. Proceeds of Letter of Credit. NCPA shall cause the amounts under the Letter of Credit to be used only to pay the principal of, interest on or Purchase Price of Bonds which are not Ineligible Bonds.

Section 5.14. Conversions; Defeasance; Redemption. NCPA (a) shall promptly furnish, or cause to be furnished, to the Bank, not later than its furnishing the same to the Remarketing Agent, a copy of any written notice furnished by NCPA to the Remarketing Agent pursuant to the Indenture indicating a proposed conversion of the interest rate on the Bonds; (b) shall not permit a conversion of the Bonds to Bonds bearing an interest rate other than a Covered Rate without the prior written consent of the Bank if, after giving effect to such conversion, any Bonds remain as Bank Bonds; and (c) upon any partial redemption of the Bonds, shall cause

Bank Bonds to be redeemed prior to other Bonds. In addition, NCPA will not defease, nor allow the defeasance of, the Bonds without having contemporaneously satisfied all of its obligations hereunder. In addition, NCPA shall not permit the pledge of the Trust Estate (including the NCPA Revenues) and all covenants, agreements and other obligations of NCPA to the owners of the Bonds to cease, terminate and become void and be discharged and satisfied, unless (i) NCPA shall pay or cause to be paid, or there shall otherwise be paid, to the owners of the Bonds the principal or redemption price thereof, and interest due or to become due thereon, at the times and in the manner stipulated therein and in the Indenture and (ii) all amounts due to the Bank have been paid.

Section 5.15. Preservation of Lien. NCPA shall take all necessary action to maintain and preserve the lien on and security interest in the Trust Estate securing the Bonds and the payment and performance of NCPA's obligations hereunder.

Section 5.16. The Trustee, Tender Agent and Remarketing Agent. (a) NCPA shall maintain one or more financial institutions reasonably acceptable to the Bank as the Trustee, the Tender Agent and the Remarketing Agent.

(b) NCPA will cause the Remarketing Agent to use its best efforts to remarket all Bonds up to the Maximum Rate that are tendered for purchase and will not direct the Remarketing Agent to cease its attempts to remarket Bonds tendered for purchase for any reason (including without limitation that any interest rate charged hereunder may be less than the interest rate that would be required to be paid to any potential purchaser of such Bonds in order that the Bonds may be sold at a purchase price equal to the par value thereof plus accrued interest thereon).

(c) If the Remarketing Agent fails to remarket Bonds for thirty (30) consecutive days, NCPA will replace the Remarketing Agent upon the written direction of the Bank, with a successor Remarketing Agent selected by NCPA and reasonably acceptable to the Bank. Any remarketing agreement entered into by NCPA after the Closing Date and in relation to the Bonds shall provide that the remarketing agent will resign only upon providing sixty (60) days prior written notice of the Bank.

Section 5.17. Additional Bond or Collateral. If at any time NCPA shall seek to restrain or preclude payment of a Drawing under the Letter of Credit or any court shall extend the term of the Letter of Credit or take any other action which has a similar affect, then, in each case, NCPA shall provide the Bank with a bond or other collateral of a type and value satisfactory to the Bank as security for the obligations of NCPA hereunder.

Section 5.18. Charges. Pursuant to terms of the Indenture, NCPA shall at all times establish charges and cause to be collected amounts for the sale of power and the operation and maintenance of the Project pursuant to the Third Phase Agreement, as shall be required to provide NCPA Revenues at least sufficient in each Fiscal Year, together with other available funds, for the payment (without duplication) of all amounts required to be paid during such Fiscal Year pursuant to the Indenture including, without limitation, all amounts due on the Bank Bonds and all other obligations of NCPA hereunder and under the Fee Letter.

Section 5.19. Parity Creditors and Covenants. In the event that NCPA has any outstanding, or hereafter shall enter into any, agreement or instrument (or any amendment, supplement or modification thereto) providing for incurrence of, support of, purchase of or relating to Parity Debt (each a “*Relevant Agreement*”), which provides to the related Parity Creditor (a) any preference or priority with respect to the Trust Estate or the allocation of the Trust Estate as compared to the pledge and allocation to, in favor, or for the benefit, of the Trustee and the Bank, (b) any additional or more restrictive covenants (including without limitation financial covenants) as compared to those made in favor of the Trustee or the Bank as set forth in the Related Documents or this Reimbursement Agreement or (c) different or additional events of default and/or greater rights and remedies (the “*Parity Covenants*”), then such Parity Covenants shall automatically be deemed to be incorporated into this Reimbursement Agreement for the duration of this Reimbursement Agreement and the Bank shall have the benefits of such Parity Covenant as if it were specifically set forth in this Reimbursement Agreement. Upon request of the Bank, NCPA shall promptly enter into an amendment to this Reimbursement Agreement to include the Parity Covenant (*provided* that the Bank shall maintain the benefit of such Parity Covenant even if NCPA fails to provide such amendment). NCPA agrees to disclose promptly to the Bank each Relevant Agreement including without limitation each standby bond purchase agreement, credit agreement, reimbursement agreement, bond purchase agreement, continuing covenant agreement, or other agreement or instrument (or amendment, supplement or modification thereto) under which, directly or indirectly any person or persons undertake to make or provide funds to purchase any Parity Debt issued by NCPA.

Section 5.20. Ratings. NCPA shall, at all times while any Bonds are Outstanding, maintain a rating on unenhanced Parity Debt (which may include the Bonds) from any two of Moody’s, Fitch and S&P and the ratings from such Rating Agencies shall be at least equal to: (a) ”Baa2” or higher by Moody’s, (b) ”BBB” or higher by Fitch or (c) ”BBB” or higher by S&P. NCPA shall at all times maintain ratings on the Bank Bonds from at least one Rating Agency. NCPA shall at all times maintain at least one long-term rating on the Bonds by one Rating Agency.

Section 5.21. Redaction Upon Disclosure. In the event NCPA delivers or permits, authorizes or consents to the delivery of this Reimbursement Agreement to the Remarketing Agent or any other Person for delivery to the Municipal Securities Rulemaking Board pursuant to Rule G- 34 (“*CUSIP Numbers, New Issue, and Market Information Requirements*”), then prior to such delivery NCPA shall redact such confidential information contained herein which could be used in a fraudulent manner, such as VRDO liquidity bank routing or account numbers, as may be requested by the Bank and which redaction is consistent with MSRB Notice 2011- 17 (February 23, 2011). Only such copy of this Reimbursement Agreement reflecting such redacted material shall be delivered to the Municipal Securities Rulemaking Board.

Section 5.22. Environmental Covenant. NCPA will:

- (a) except as disclosed in the Remarketing Memorandum, use and operate the Project in compliance with all Environmental Laws where the failure to do so could have a Material Adverse Effect, keep all material permits, approvals, certificates, licenses and other authorizations relating to environmental matters in connection with the Project in

effect and remain in material compliance therewith, and handle all hazardous materials in connection with the Project in material compliance with all applicable Environmental Laws;

(b) promptly notify the Bank and provide copies upon receipt of all material written claims, complaints, notices or inquiries relating to the condition of the Project (regarding compliance with Environmental Laws), and shall promptly cure and have dismissed, to the reasonable satisfaction of the Bank, any actions and proceedings relating to the Project's compliance with Environmental Laws, *provided* that the foregoing shall not prevent NCPA from contesting any claim, complaint, action or proceeding so long as such contest is prosecuted with reasonable diligence and its prosecution does not have a Material Adverse Effect; and

(c) provide such information and certifications which the Bank may reasonably request from time to time to evidence compliance with this Section 5.22.

Section 5.23. Maintenance of Approvals, Filings, Etc. NCPA shall at all times take such reasonable actions as are within its control in order, to maintain in effect, renew and comply with all the terms and conditions of all consents, licenses, approvals and authorizations as may be necessary or appropriate under any applicable law or regulation (including any requirements regarding licensure of the Project by FERC) for its performance of this Reimbursement Agreement, the other Related Documents to which it is a party and the Governing Documents.

Section 5.24. Sound Utility Practice. NCPA shall maintain, preserve, operate and keep the Project in accordance with sound utility practice and shall maintain in force and effect such policies of fire and casualty insurance as may be customary for facilities comparable to the Project owned by government agencies.

Section 5.25. CUSIP Numbers. NCPA shall at all times (i) cause Bonds which are not Bank Bonds to be assigned the Investor CUSIP Number, and (ii) cause Bank Bonds to be assigned the Bank Bond CUSIP Number. As a condition to the issuance of the Letter of Credit, the Bloomberg Municipal Bond Description Screen describing the Bonds shall contain the following information: (a) a description of the Bonds, (b) the Investor CUSIP Number, (c) the Bank Bond CUSIP Number, (d) the long-term and short-term rating assigned to the Bonds by each Rating Agency then rating the Bonds which are assigned the Investor CUSIP Number and (e) a long-term rating assigned to the Bonds by each Rating Agency then rating the Bonds bearing the Bank Bond CUSIP Number.

ARTICLE VI

NEGATIVE COVENANTS

So long as the Termination Date has not occurred or any amount is due or owing to the Bank under this Reimbursement Agreement or any Related Document, NCPA shall comply with each of the negative covenants contained in this Article VI unless the Bank shall have otherwise given its prior written consent:

Section 6.01. Amendments. NCPA shall not amend, modify or supplement, nor agree to any amendment or modification of, or supplement to, any of the Related Documents, without the prior written consent of the Bank, which shall not be unreasonably withheld; *provided, however,* that the prior written consent of the Bank shall not be required for (i) any indentures supplemental to the Indenture executed to provide for the issuance of one or more series of bonds and which do not amend the Original Indenture or (ii) any indentures supplemental to the Indenture for any of the purposes set forth in Section 1101 of the Original Indenture. NCPA shall not amend, modify or supplement, nor agree to any amendment or modification of, or supplement to, the Joint Powers Agreement in a manner which would have a Material Adverse Effect without the prior written consent of the Bank, which shall not be unreasonably withheld.

Section 6.02. Existence. Subject to any legislation which may be enacted into law in the State or the Congress of the United States subsequent to the Closing Date, NCPA (a) will preserve and maintain its existence as a joint powers agency, rights (charter and statutory), franchises and licenses, if the failure to preserve and maintain any of the foregoing could reasonably be expected to have a Material Adverse Effect, and (b) will not, without the prior written consent of the Bank, (i) merge or consolidate with any other organization nor (ii) sell, lease or transfer all or substantially all of its property constituting the Project, except as otherwise provided in the Indenture, the Governing Documents and the Act.

Section 6.03. Certain Information. NCPA shall not include in an offering document for the Bonds any information concerning the Bank that is not supplied in writing, or otherwise approved, by the Bank expressly for inclusion therein.

Section 6.04. Debt. NCPA shall not incur any Debt (i) payable from the Trust Estate which is senior or prior in right to the Bonds or (ii) except in compliance with the terms of the Indenture.

Section 6.05. Liens. Unless otherwise provided in the Indenture as in effect on the Closing Date, NCPA will not grant, create, permit or suffer the creation of any Lien on the rights in and to the security interests created in the Trust Estate (including the NCPA Revenues) in favor of the holders of the Bonds (including the Bank Bonds) and the other obligations hereunder, except such Liens as are created pursuant to the Related Documents in favor of the Trustee, the holders of Parity Debt issued and outstanding under the Indenture from time to time, and the Bank.

Section 6.06. Trustee; Tender Agent; Paying Agent; Remarketing Agent. NCPA shall not remove the Trustee, the Tender Agent, the Paying Agent or the Remarketing Agent or appoint a successor Trustee, Tender Agent, Paying Agent or Remarketing Agent without the prior written approval of the Bank, which shall not be unreasonably withheld. If the position of Trustee, Tender Agent, Paying Agent or Remarketing Agent becomes vacant, NCPA shall promptly appoint a successor which is reasonably acceptable to the Bank.

Section 6.07. Exempt Status. NCPA shall not take any action or omit to take any action that, if taken or omitted, would adversely affect the excludability of interest on the Bonds from the gross income of the holders thereof for purposes of Federal income taxation under the Code.

Section 6.08. Voluntary Redemption or Conversion. (a) NCPA shall not voluntarily redeem any Bonds pursuant to the Indenture prior to redeeming Bank Bonds in full or if, after giving effect to such redemption, there would be any unpaid Excess Interest Amount owing under this Reimbursement Agreement or any other amount in respect of such Bank Bonds which shall not have been paid in full. NCPA shall not voluntarily convert any Bonds to a rate other than Covered Rate pursuant to the Indenture if, after giving effect to such conversion, there would be any unpaid Excess Interest Amount owing under this Reimbursement Agreement or any other amount in respect of such Bank Bonds which shall not have been paid in full.

(b) In the event that a Drawing under the Letter of Credit is to be made in connection with the optional redemption of any Bonds, NCPA shall have paid or caused to be paid to the Paying Agent, or shall make provision satisfactory to the Bank for the payment on or before the redemption date of, an amount which, in addition to other amounts available therefor and held by the Paying Agent, is sufficient to redeem, on the redemption date at a redemption price equal to one hundred percent (100%) of the principal amount thereof, plus premium, if applicable, all of the Bonds to be redeemed; any such amounts deposited with the Paying Agent shall either be held uninvested by the Paying Agent or be invested at the written direction of NCPA only in direct obligations of or obligations unconditionally guaranteed by the United States having a maturity date on or prior to the redemption date. In the event that a conditional notice of redemption is given and such moneys are not timely received, the redemption for which such notice was given shall not be undertaken. In the event NCPA elects to redeem less than all of the Outstanding Bonds for optional redemption as described in this Section 6.08(b), NCPA shall instruct the Paying Agent in writing to, and upon such instruction the Paying Agent shall, redeem Bank Bonds prior to selecting any other Bonds for redemption.

Section 6.09. Impairment of Bank's Rights. NCPA shall not take any action, or cause the Trustee to take any action, under the Indenture, the Bonds, the other Related Documents, any Parity Debt or the Remarketing Agreement otherwise inconsistent with or impairing the rights of the Bank under this Reimbursement Agreement or any other Related Document including, without limitation, the obligation of NCPA to pay any obligations owed to the Bank.

Section 6.10. Sale of Project. The Project shall not be sold or otherwise disposed of, as a whole or substantially as a whole, unless (i) such sale or other disposition be so arranged as to provide for a continuance of payment of NCPA Revenues sufficient in amount to permit payment therefrom when due, at maturity or upon redemption, of the principal of, premium, if any, and interest on all outstanding Bonds and the obligations owed to the Bank hereunder or under the Bank Bonds, or to provide for a continuance of payment sufficient for such purposes into some other fund charged with the payment of all such amounts, or (ii) the Bank consents to such sale or disposition, such consent not to be unreasonably withheld (it being understood that failure by the Bank to provide such consent after undertaking its normal credit review and approval process for any proposed arrangements described herein shall not be unreasonable).

Section 6.11. Investments. NCPA will not make any investment, nor enter into any agreements for the purpose of effecting any investment, which is not permitted pursuant to the Act, the Governing Documents, the Investment Policy or the Indenture and will promptly

notify the Bank in writing, after the adoption thereof by NCPA, of any change in the Investment Policy, which change increases the types of investments permitted by the Investment Policy.

Section 6.12. Termination of Power Purchase Contract. NCPA shall not terminate or permit the termination of the Power Purchase Contract while the Letter of Credit is outstanding or while any amounts are owed to the Bank hereunder.

Section 6.13. Accounting Method Not to Change. NCPA shall not change its method of accounting (unless required to comply with GAAP, consistently applied) or the times of commencement or termination of fiscal years or other accounting periods without first disclosing in writing such change to the Bank.

Section 6.14. ERISA Matters. NCPA will not adopt, or incur any material obligation or liability under or in respect of, any employee benefit plan, within the meaning of Section 3(3) of ERISA, that is subject to Title I or Title IV of ERISA.

Section 6.15. Swap Contracts. NCPA will not enter into any Swap Contract with respect to any NCPA Revenues (i) wherein any termination payments or settlement amounts are senior to or on parity with the payment of the Bonds or the Reimbursement Obligations hereunder or (ii) which requires NCPA to post cash collateral to secure its obligations thereunder, in each case, without the prior written consent of the Bank.

Section 6.16. Regulations G, T, U and X. No proceeds from moneys received hereunder shall be used by NCPA in violation of Regulations G, T, U and X, as amended, promulgated by the Board of Governors of the Federal Reserve System.

Section 6.17. Anti-Corruption Laws. NCPA will not directly or indirectly, use any proceeds from the remarketing of the Bonds for any purpose which would breach the United States Foreign Corrupt Practices Act of 1977.

Section 6.18. Joint Powers Agreement. NCPA shall not terminate nor permit the termination of the Joint Powers Agreement.

Section 6.19. Sanctions. NCPA will not directly or indirectly, use any proceeds from the remarketing of the Bonds, or lend, contribute or otherwise make available such proceeds to any Person, to fund any activities of or business with any Person, or in any Designated Jurisdiction, that, at the time of such funding, is the subject of Sanctions, or in any other manner that will result in a violation by any Person of Sanctions.

ARTICLE VII

EVENTS OF DEFAULT

Section 7.01. Events of Default. The occurrence of any of the following events (including the expiration of any specified time) shall constitute an “Event of Default,” unless waived by the Bank in writing:

(a) Failure of NCPA to pay when due any amount owed hereunder, under the Fee Letter or under any of the other Related Documents or the principal of or the interest on the Bonds or any Parity Debt; *provided, however*, that with respect to any amounts owed to the Bank pursuant to the Fee Letter, such failure shall not constitute an Event of Default unless such failure continues for two (2) Business Days following the date such amount became due and payable.

(b) Failure of NCPA to observe the covenants set forth in Sections 5.09, 5.12, 5.13, 5.14 (other than clause (a) thereof), 5.15, 5.17, 6.01, 6.02, 6.04, 6.05, 6.06, 6.09, 6.10, 6.12 or 6.14.

(c) Failure of NCPA to observe or perform any other term, covenant, or agreement of (or incorporated by reference in) this Reimbursement Agreement (other than as specified in (a) or (b) above or (i) below) and the continuance of such default for thirty (30) days after the earlier of (x) the date on which notice thereof has been given to NCPA by the Bank or (y) the date on which any officer of NCPA obtained actual knowledge thereof.

(d) Any representation or warranty made by NCPA in this Reimbursement Agreement (or incorporated herein by reference) shall prove to have been untrue in any material respect when made.

(e) Any “event of default” under any Related Document (as defined respectively therein) shall have occurred.

(f) Default by NCPA in the payment of any amount due in respect of any Parity Debt (including, without limitation, any regularly scheduled payments on any Interest Rate Protection Agreement which constitute Parity Debt), as and when the same shall become due, or default under any mortgage, agreement or other instrument under or pursuant to which such Parity Debt is incurred or issued, and continuance of such default beyond the period of grace, if any, allowed with respect thereto, or the occurrence of any act or omission by NCPA under any such mortgage, agreement or other instrument which results in such Parity Debt becoming, or being capable of becoming, immediately due and payable (or, with respect to any Interest Rate Protection Agreement, which results in such Interest Rate Protection Agreement being terminated early or being capable of being terminated early).

(g) The entry or filing of any judgment, writ or warrant of attachment or of any similar process in an amount in excess of \$5,000,000 against NCPA relating to the Trust Estate or against the Project and failure of NCPA to vacate, bond, stay, appeal (if such appeal acts to stay the enforcement of such judgment, writ or warrant of attachment), or contest in good faith such judgment, writ, warrant of attachment or other process for a period of 90 days or failure to pay or satisfy such judgment within 90 days.

(h) The occurrence of an Event of Insolvency with respect to NCPA.

(i) The rating assigned to the Bonds or any Parity Debt (without regard to third party credit enhancement) by Moody's, Fitch or S&P, in each case to the extent then providing a rating at the request of NCPA, shall be withdrawn, suspended or falls to or below "Baa3" by Moody's, "BBB-" by Fitch or "BBB-" by S&P.

(j) (i) Any material provision of this Reimbursement Agreement, the Fee Letter, the Act or any of the Related Documents (other than a Remarketing Agreement that is terminated in accordance with terms thereof) or any of the Governing Documents ceases to be valid and binding on NCPA for any reason or this Reimbursement Agreement the Fee Letter, the Act or any of the other Related Documents or any of the Governing Documents is declared null and void, or the validity or enforceability thereof is contested by NCPA or any officer of NCPA or by the Governmental Authority having jurisdiction or NCPA denies it has any or further liability under this Reimbursement Agreement the Fee Letter, the Act or any of the other Related Documents or any of the Governing Documents, or such document is cancelled or terminated without the prior written consent of the Bank, or NCPA shall seek an adjudication that this Reimbursement Agreement, any other Related Document to which NCPA is a party, or any of the Governing Documents or any provision of the Indenture relating to the security for the Bonds or the Obligations, NCPA's ability to pay the Obligations or perform its obligations hereunder or the rights and remedies of the Bank, is not valid and binding on NCPA; or (ii) any pledge or security interest created by the Indenture or this Reimbursement Agreement to secure any amount due under any Bonds, the Bank Bonds, this Reimbursement Agreement or the Fee Letter shall fail to be fully enforceable or fail to have the priority required thereunder.

(k) Any actual seizure, vesting or intervention, by or under a Governmental Authority by which NCPA's management is displaced or its authority or control of its business relating to the Project is curtailed.

(l) Attachment or restraint of any funds or other property relating to the Trust Estate or the Project which may be in, or come into, the possession or control of the Trustee or the Bank or of any third party acting on the Bank's behalf, for the account or benefit of NCPA, or, except for limitations on remedies available against public agencies such as NCPA in the State, the issuance of any order of any court or other legal process against the same.

(m) An event has occurred and is continuing which has or is having a Material Adverse Effect.

(n) The powers of NCPA shall be limited in any way or the Indenture shall be modified or amended in any way without the prior written consent of the Bank, in either case, which prevents NCPA from fixing, charging or collecting rates and charges for the use and services of the Project in any amount sufficient to pay its debts as they become due.

(o) NCPA shall (i) default on the payment of the principal of or interest on any Debt (other than Parity Debt) including, without limitation, any regularly scheduled payments on Interest Rate Protection Agreements, aggregating in excess of \$10,000,000, beyond the period of grace, if any, provided in the instrument or agreement under which such Debt (other than Parity Debt) was created or incurred; or (ii) default in the observance or performance of any agreement or condition relating to any Debt (other than Parity Debt) aggregating in excess of \$10,000,000, or contained in any instrument or agreement evidencing, securing or relating thereto, or any other default, event of default or similar event shall occur or condition exist, the effect of which default, event of default or similar event or condition is to permit (determined without regard to whether any notice is required) any such Debt to become immediately due and payable in full as the result of the acceleration, mandatory redemption or mandatory tender of such Debt.

Section 7.02. Rights and Remedies. (a) Upon the occurrence and continuation of an Event of Default, the Bank, in its sole discretion, (i) may, by notice to NCPA, the Tender Agent and the Trustee, declare the obligations of NCPA hereunder (other than amounts owed on Bank Bonds) to be immediately due and payable, and the same shall thereupon become immediately due and payable (*provided* that, the obligations of NCPA hereunder shall be and become automatically and immediately due and payable without such notice upon the occurrence of an Event of Default described in Section 7.01(h) above), without demand, presentment, protest or further notice of any kind, all of which are hereby expressly waived by NCPA, (ii) may deliver to the Trustee and the Tender Agent written notice as described in the Letter of Credit that an Event of Default has been declared under this Reimbursement Agreement and that the Letter of Credit will terminate six (6) Business Days after receipt of such notice together with a written request that the Trustee call the Bonds for mandatory tender for purchase, (iii) may deliver to the Trustee and the Tender Agent written notices as described in the Letter of Credit that the applicable Interest Drawing shall not be reinstated following such Interest Drawing, (iv) may cure any default, event of default or event of nonperformance under this Reimbursement Agreement or under any of the Related Documents (in which event NCPA shall reimburse the Bank therefor pursuant to Section 2.09), (v) may exercise its banker's lien, or right of set-off with respect to the Project, (vi) may deliver written notice to the Trustee directing that all Bank Bonds be redeemed immediately pursuant to Section 401(e) and 401(f) of the Supplemental Indenture on the Business Day immediately succeeding the date on which the Trustee shall have received such notice, (vii) may proceed to protect its right by suit in equity, action at law or other appropriate proceedings for specific performance of any covenant or agreement of NCPA herein contained or (viii) may exercise any other rights or remedies available under any Related Document, any other agreement or at law or in equity. The rights and remedies of the Bank

specified herein are for the sole and exclusive benefit, use and protection of the Bank, and the Bank is entitled, but shall have no duty or obligation to NCPA, the Trustee, the Tender Agent, the Bondholders or otherwise, (1) to exercise or to refrain from exercising any right or remedy reserved to the Bank hereunder, or (2) to cause the Trustee or any other party to exercise or to refrain from exercising any right or remedy available to it under any of the Related Documents.

(b) From and after the occurrence of an Event of Default, all amounts owing to the Bank hereunder and amounts owing on any Bank Bonds shall bear interest at the Default Rate.

Section 7.03. Suits at Law or in Equity and Mandamus. If any Event of Default shall occur, then and in every such case the Bank shall be entitled to proceed to protect and enforce its rights by such appropriate judicial proceeding as it may deem most effectual to protect and enforce any such right, either by suit, in equity, or by action at law, whether for the specific performance of any covenant or agreement contained in this Reimbursement Agreement, in aid of the exercise of any power granted in this Reimbursement Agreement, or to enforce any other legal or equitable right vested in the Bank by this Reimbursement Agreement, the Bank Bonds, the Related Documents or by law. The provisions of this Reimbursement Agreement shall be a contract with the Bank and the duties of NCPA shall be enforceable, subject to judicial discretion and the availability of equitable remedies, by the Bank by mandamus or other appropriate suit, action, or proceeding in any court of competent jurisdiction.

ARTICLE VIII

NATURE OF OBLIGATIONS; INDEMNIFICATION

Section 8.01. Obligations Absolute. The payment obligations of NCPA under this Reimbursement Agreement shall be unconditional and irrevocable, and shall be paid strictly in accordance with the terms of this Reimbursement Agreement under all circumstances, including, without limitation, the following circumstances:

(i) any lack of validity or enforceability of the Letter of Credit or any of the other Related Documents;

(ii) any amendment or waiver of or any consent to departure from all or any of the Related Documents (unless consented to in writing by the Bank);

(iii) the existence of any claim, set-off, defense (other than the defense of payment) or other right which NCPA may have at any time against the Trustee or any other beneficiary, or any transferee, of the Letter of Credit (or any persons or entities for whom the Trustee, any such beneficiary or any such transferee may be acting), the Bank, or any other person or entity, whether in connection with this Reimbursement Agreement, the transactions contemplated herein or in the Related Documents, or any unrelated transaction;

(iv) any statement or any other document presented under the Letter of Credit proving to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; or

(v) payment by the Bank under the Letter of Credit against presentation of a draft or certificate which does not comply with the terms of the Letter of Credit.

Notwithstanding this Section, the Bank acknowledges NCPA may have the right to bring a collateral action with respect to one or more of the foregoing circumstances in accordance with Section 8.03 hereof. NCPA's payment obligations shall remain in full force and effect pending the final disposition of any such action.

Section 8.02. Continuing Obligation. This Reimbursement Agreement is a continuing obligation, shall survive the expiration of the Letter of Credit and shall (a) be binding upon NCPA, its successors and assigns, and (b) inure to the benefit of and be enforceable by the Bank and its successors, transferees and assigns; *provided* that NCPA may not, except as otherwise expressly provided herein, assign all or any part of this Reimbursement Agreement without the prior written consent of the Bank.

Section 8.03. Liability of the Bank. (a) With respect to the Bank, NCPA assumes all risks of the acts or omissions of the Trustee, the Tender Agent and their agents in respect of their use of the Letter of Credit or this Reimbursement Agreement or any amounts made available by the Bank hereunder or under the Letter of Credit. Neither the Bank nor any of its officers or directors shall be liable or responsible for: (i) the use which may be made of this Reimbursement Agreement or the Letter of Credit or any amounts made available by the Bank under the Letter of Credit or for any acts or omissions of the Trustee, the Tender Agent or the Remarketing Agent or their agents in connection therewith; (ii) the validity, sufficiency or genuineness of documents (other than the validity of this Reimbursement Agreement as to the Bank), or of any endorsement(s) thereon, even if such documents should in fact prove to be in any or all respects invalid, insufficient, fraudulent or forged (other than for fraud or forgery by the Bank or its officers or directors as a result of willful misconduct or gross negligence of the Bank or such officers or directors); (iii) the lack of validity or enforceability of this Reimbursement Agreement, the Bonds, the Related Documents or any other agreement or instrument relating thereto (other than the validity or enforceability as against the Bank of any agreement to which the Bank is a party); (iv) payment by the Bank against presentation of documents which do not strictly comply with the terms of the Letter of Credit, including failure of any documents to bear any reference or adequate reference to the Letter of Credit; provided that such payment shall have been made in good faith and shall not have constituted gross negligence of the Bank; or (v) any other circumstances whatsoever in making or failing to honor a properly presented and conforming drawing under the Letter of Credit, except only that NCPA shall have a claim against the Bank and the Bank shall be liable to NCPA to the extent, but only to the extent, of any direct, as opposed to consequential, damages suffered by NCPA which a court of competent jurisdiction finds in a final and non-appealable judgment were solely and directly caused by the Bank's failure to honor a properly presented and conforming drawing under the Letter of Credit in accordance with the terms thereof. In furtherance and not in limitation of the foregoing, the Bank may accept documents that appear on their face to be in

order, without responsibility for further investigation, regardless of any notice or information to the contrary.

(b) NCPA assumes all risks associated with the acceptance by the Bank of documents received by telecommunication, it being agreed that the use of telecommunication devices is for the benefit of NCPA and that the Bank assumes no liabilities or risks with respect thereto.

Section 8.04. Reimbursement. (a) To the extent permitted by law, NCPA agrees to reimburse and hold harmless the Bank, its officers, directors, employees, and agents (each a “Reimbursed Party”) from and against any and all claims, damages, losses, liabilities, reasonable costs or expenses which a Reimbursed Party may incur or be subject to (or which may be claimed against a Reimbursed Party by any Person) by reason of or in connection with the execution and delivery of and consummation of the transactions contemplated under this Reimbursement Agreement, the Letter of Credit, the Indenture and the other Related Documents, including, without limitation, (i) the offering, sale, remarketing or resale of the Bonds (including, without limitation, by reason of any untrue statement or alleged untrue statement contained or incorporated by reference in any preliminary official statement or official statement, or in any supplement or amendment thereof, prepared with respect to the Bonds, or the omission or alleged omission to state therein a material fact necessary to make such statements, in the light of the circumstances under which they are or were made, not misleading or the failure to deliver a preliminary official statement or an official statement to any offeree or purchaser of the Bonds), (ii) the execution and delivery of, or payment or failure to pay by any Person (other than the Bank as and when required by the terms and provisions of the Letter of Credit) under, this Reimbursement Agreement, (iii) any Drawing or the Letter of Credit or the use or proposed use of the proceeds therefrom (including any refusal by the Bank to honor a demand for payment under its Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit), (iv) the execution and delivery of, or payment or failure to pay under, the Letter of Credit, (v) the use of the proceeds of the sale of the Bonds or (vi) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by NCPA, and regardless of whether any Reimbursed Party is a party thereto; *provided, however,* that NCPA shall not be required to reimburse the Bank for any claims, damages, losses, liabilities, costs or expenses to the extent, but only to the extent, caused by (1) the willful misconduct or gross negligence of the Bank (including without limitation, with respect to the Bank, failure of the Bank to honor its obligations to purchase Bonds upon the satisfaction of the applicable conditions precedent set forth herein and in accordance with the terms of this Reimbursement Agreement and the Letter of Credit) or (2) the material inaccuracy of any information included or incorporated by reference in any offering document concerning the Bank which was furnished in writing by the Bank expressly for inclusion or incorporated by reference therein. Nothing in this Section 8.04 is intended to limit the obligations of NCPA under the Bonds or of NCPA to pay its obligations hereunder, under the Indenture and under the other Related Documents.

(b) To the fullest extent permitted by applicable law, NCPA shall not assert, and hereby waives, and acknowledges that no other Person shall have, any claim against any Reimbursed Party, on any theory of liability, for special, indirect, consequential or punitive damages (as

opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Reimbursement Agreement, any other Related Document, the Remarketing Memorandum or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Drawing or Letter of Credit or the use of the proceeds thereof. No Reimbursed Party referred to in subsection (a) above shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed to such unintended recipients by such Reimbursed Party through telecommunications, electronic or other information transmission systems in connection with this Reimbursement Agreement or the other Related Documents, the Remarketing Memorandum or the transactions contemplated hereby or thereby other than for direct or actual damages resulting from the gross negligence or willful misconduct of such Reimbursed Party as determined by a final and nonappealable judgment of a court of competent jurisdiction.

(c) The provisions of this Section 8.04 shall survive the termination of this Reimbursement Agreement and the payment in full of the Bonds and the Obligations of NCPA hereunder and thereunder. The Bank shall notify NCPA of any amounts which are owed to such party pursuant to this Section 8.04.

ARTICLE IX

TRANSFER, REDUCTION OR EXTENSION OF LETTER OF CREDIT

Section 9.01. Transfer, Reduction and Reinstatement. The Letter of Credit may be transferred, reduced and reinstated in accordance with the provisions set forth therein. The Bank shall have no duty to determine the proper identity of anyone appearing in any transfer request, Drawing, or other document as transferee, nor shall the Bank be responsible for the validity or correctness of any transfer.

Section 9.02. Extension. The Stated Expiration Date of the Letter of Credit may be extended by the Bank upon the written request of NCPA given to the Bank at least [120] days prior to, but no earlier than 180 days prior to, the Stated Expiration Date. By making any such request, NCPA shall be deemed to represent and warrant that (a) no Default or Event of Default has occurred and is continuing, (b) no Material Litigation is pending, (c) no event has occurred and is continuing which would have a Material Adverse Effect and (d) all representations and warranties of NCPA made in this Reimbursement Agreement are true and correct and are deemed to be made as of the date of such request. Within 30 days of receipt of a request for extension, the Bank shall, at its sole option, either notify NCPA and the Trustee that the Letter of Credit will be extended to the new Stated Expiration Date set forth in such notice in accordance with the terms of the Letter of Credit or notify NCPA that the Letter of Credit will not be so extended. The Bank's failure to so respond to a requested extension of the Stated Expiration Date shall constitute the Bank's denial of such request. If the Stated Expiration Date of the Letter of Credit is extended, NCPA shall, except as otherwise agreed to in writing by the Bank, be deemed to have made the representations and warranties contained herein on and as of the date on which the Stated Expiration Date of the Letter of Credit is so extended.

ARTICLE X

MISCELLANEOUS

Section 10.01. Right of Setoff. Upon the occurrence and during the continuance of an Event of Default, the Bank may, to the extent permitted by law and not inconsistent with the provisions of the Indenture, at any time and from time to time, without notice to NCPA or any other Person (any such notice being expressly waived to the extent permitted by law), set off, to exercise any banker's lien or any right of attachment and appropriate and apply, against and on account of, any obligations and liabilities of NCPA to the Bank arising under or connected with this Reimbursement Agreement, the Fee Letter and the other Related Documents, without regard to whether or not the Bank shall have made any demand therefor, and although such obligations and liabilities may be contingent or unmatured, any and all balances, credits, deposits and monies (general or special, including but not limited to indebtedness evidenced by certificates of deposit, whether matured or unmatured, but not including trust accounts or the Trust Estate) relating to the Project, the Trust Estate or constituting NCPA Revenues and any other indebtedness or other payment obligation at any time held or owing by the Bank to or for the credit or the account of NCPA relating to the Project.

(b) The rights of the Bank under this Section 10.01 are in addition to, in augmentation of, and, except as specifically provided in this Section 10.01, do not derogate from or impair other rights and remedies (including, without limitation, other rights of setoff) which the Bank may have hereunder.

Section 10.02. Amendments and Waivers. No amendment or waiver of any provision of this Reimbursement Agreement nor consent to any departure by NCPA from any such provision shall in any event be effective unless the same shall be in writing and signed by the Bank and, in the case of any amendment, NCPA. Any such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given. In the event any agreement contained in this Reimbursement Agreement should be breached by NCPA and thereafter waived by the Bank, such waiver shall be limited to the particular breach so waived for the specific period set out in such waiver and such waiver shall not constitute a waiver of such breach for any other period and shall not waive any other or similar breach hereunder.

Section 10.03. No Waiver; Remedies. No failure on the part of the Bank or NCPA to exercise, and no delay in exercising, any right under this Reimbursement Agreement shall operate as a waiver of such right; nor shall any single or partial exercise of any right under this Reimbursement Agreement preclude any other further exercise of such right or the exercise of any other right. The remedies herein provided are cumulative and not exclusive of any remedies provided by law.

Section 10.04. Notices. Unless specifically indicated otherwise herein, all notices and other communications provided for hereunder shall be in writing and

if to NCPA, addressed to it at:

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678
Attention: General Manager
Telephone: (916) 781- 4200
Facsimile: (916) 781- 4254
Email: [_____]

or if to the Bank, with respect to the Letter of Credit, addressed to it at:

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507
Attention: Standby Letter of Credit Department
Telephone: (800) 370-7519
Telecopy: (800) 755-8743
Email: [_____]

or if to the Bank, with respect to all matters, addressed to it at:

Bank of America, N.A.
211 N. Robinson Ave.
OK1-100-02-30
Oklahoma City, Oklahoma 73102
Attention: Brent Riley, Senior Vice President
Telephone: (405) 230-1717
Telecopy: (866) 681-1873
Email: brent.riley@baml.com

or if to the Trustee or the Tender Agent, addressed to it at:

U.S. Bank National Association
100 Wall Street, Suite 1600
New York, New York 10005
Attention: Corporate Trust Services
Telephone: (212) 951-6990
Facsimile: (212) 361-6153
Email: [_____]

or if to the Remarketing Agent, addressed to it at:

Citigroup Global Markets Inc.
390 Greenwich Street, 2nd Floor
New York, New York 10013
Attention: Manager, Short Term Finance Group
Telephone: (212) 723- 5688
Facsimile: (212) 723- 8809
Email: [_____]

or as to each party at such other address as shall be designated by such party in a written notice to the other parties.

Section 10.05. Severability. Any provision of this Reimbursement Agreement which is prohibited, unenforceable or not authorized in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition, unenforceability or nonauthorization without invalidating the remaining provisions hereof or affecting the validity, enforceability or legality of such provision in any other jurisdiction. The parties shall endeavor in good faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

Section 10.06. GOVERNING LAW. THIS REIMBURSEMENT AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REFERENCE TO PRINCIPLES OF CONFLICTS OF LAWS (OTHER THAN NEW YORK GENERAL OBLIGATIONS LAWS 5-1401 AND 5-1402), PROVIDED THAT THE POWER AND AUTHORITY OF NCPA TO ENTER INTO THIS AGREEMENT, THE CUSTODY AGREEMENT AND THE FEE LETTER AND THE OBLIGATIONS OF NCPA HEREUNDER AND THEREUNDER SHALL BE GOVERNED BY THE LAWS OF THE STATE OF CALIFORNIA. TO THE EXTENT THAT THE BANK OR NCPA HAS GREATER RIGHTS OR REMEDIES UNDER FEDERAL LAW, THIS SECTION WILL NOT BE DEEMED TO DEPRIVE THE BANK OR NCPA OF SUCH RIGHTS AND REMEDIES AS MAY BE AVAILABLE UNDER FEDERAL LAW.

Section 10.07. Consent to Jurisdiction, Venue and Service of Process. Pursuant to, and in accordance with, Section 5-1402 of the New York General Obligations Law (or any successor statute thereto), NCPA, to the extent permitted by law, and the Bank irrevocably (a) agree that

any suit, action or other legal proceeding arising out of or relating to this Reimbursement Agreement may be brought in the non-exclusive jurisdiction of a court of record in the State of New York located in the Borough of Manhattan or in the United States District Court for the Southern District of the State of New York located in the Borough of Manhattan or in the State of California located in the County of Sacramento or the United States District Court for the Eastern District of California, and any Appellate Court from any thereof, (b) consent to the jurisdiction of each such court in any such suit, action or proceeding, and (c) waive any objection which it may have to the laying of venue of any such suit, action or proceeding in any of such courts and any claim that any such suit, action or proceeding has been brought in an inconvenient forum. NCPA, to the extent permitted by law, and the Bank agree that a final judgment in any suit, action or proceeding shall be conclusive and may be enforced in appropriate jurisdictions by suit on the judgment or in any other manner provided by law. All mailings under this Section 10.07 shall be by certified mail, return receipt requested.

Nothing in this Section 10.07 shall affect the right of NCPA or the Bank to serve legal process in any other manner permitted by law or affect the right of NCPA or the Bank to bring any suit, action or proceeding against the other party or its property in the courts of any other jurisdiction.

Section 10.08. Headings. Section headings in this Reimbursement Agreement are included herein for convenience of reference only and shall not have any effect for purposes of interpretation or construction of the terms of this Reimbursement Agreement.

Section 10.09. Participations. NCPA acknowledges and agrees that the Bank may participate portions of its obligations under the Letter of Credit and the obligations of NCPA under the Bank Bonds, this Reimbursement Agreement and any other Related Documents (collectively, the "*Participated Obligations*") to other financial institutions and waives any notice of such participations; *provided, however* that the Participated Obligations shall not affect the obligations of the Bank under the Letter of Credit. NCPA further acknowledges and agrees that upon any such participation the Participants will become owners of a pro rata portion of the Participated Obligations. Following the grant of any participation interest in the Participated Obligations, the Bank shall provide written notice to NCPA of such participation, including the name of the Participant; *provided, however*, the failure to give such notice shall not in any way limit the obligations of NCPA hereunder or under the Related Documents and shall not result in any liability on the part of the Bank. NCPA shall not by virtue of any participation have any obligation to deal directly with any Participant but shall continue to deal solely with the Bank. No such Participant shall be entitled to receive payment hereunder of any amount greater than the amount which would have been payable had the Bank not granted a participation to such Participant.

Section 10.10. Successors and Assigns. This Reimbursement Agreement shall be binding upon and inure to the benefit of NCPA, the Bank and their respective successors, and assigns, except that NCPA may not assign or transfer its rights or obligations hereunder (other than by merger or consolidation) without the prior written consent of the Bank. This Reimbursement Agreement is a continuing obligation and shall survive the Termination Date. The Bank may grant interests in its rights hereunder as provided in Section 10.09 or otherwise assign its rights,

in whole or in part, hereunder with the prior written consent of NCPA; *provided, however*, that no such grant or assignment shall affect the obligations of the Bank under the Letter of Credit.

Notwithstanding any other provision of this Reimbursement Agreement, the Bank may at any time pledge or grant a security interest in all or any portion of its rights hereunder or under any Bank Bond (including, without limitation, rights to payment under this Reimbursement Agreement or under any Bank Bond) to secure obligations of the Bank, including any pledge or assignment to secure obligations to a Federal Reserve Bank or to any state or local governmental entity or with respect to public deposits, without notice to or consent of NCPA; *provided* that no such pledge or grant of a security interest shall release the Bank from any of its obligations hereunder, as the case may be, or substitute any such pledge or grantee for the Bank as a party hereto, as the case may be. Upon request by the Bank, NCPA agrees to cooperate with the Bank and to take such actions as are reasonably necessary to assist the Bank in making such pledge or granting such security interest.

Section 10.11. Counterparts. This Reimbursement Agreement may be signed in any number of counterpart copies, but all such copies shall constitute one and the same instrument.

Section 10.12. Complete and Controlling Agreement. This Reimbursement Agreement, the Fee Letter and the Custody Agreement constitute the entire understanding of the parties with respect to the subject matter hereof and thereof and any prior agreements, whether written or oral, between the Bank and NCPA relating to the issuance of the Letter of Credit and all matters set forth herein and therein are superseded thereby.

Section 10.13. WAIVER OF JURY TRIAL. (a) TO THE EXTENT PERMITTED BY LAW, NCPA AND THE BANK EACH HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY RIGHTS THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION (WHETHER AS CLAIM, COUNTER-CLAIM, AFFIRMATIVE DEFENSE OR OTHERWISE) BASED HEREON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH, THIS REIMBURSEMENT AGREEMENT, OR ANY COURSE OF CONDUCT, COURSE OF DEALINGS, STATEMENTS (WHETHER ORAL OR WRITTEN) OR ACTIONS OF NCPA OR THE BANK. NCPA ACKNOWLEDGES AND AGREES THAT IT HAS RECEIVED FULL AND SUFFICIENT CONSIDERATION FOR THIS PROVISION AND RECOGNIZES AND AGREES THAT THIS PROVISION IS A MATERIAL INDUCEMENT FOR THE BANK ENTERING INTO THIS REIMBURSEMENT AGREEMENT AND ISSUING THE LETTER OF CREDIT.

(b) IF THE WAIVER OF JURY TRIAL CONTAINED IN SECTION 10.13(A) HEREOF IS UNENFORCEABLE FOR ANY REASON, AND ANY ACTION OR PROCEEDING IS FILED IN A COURT OF THE STATE OF CALIFORNIA BY OR AGAINST ANY PARTY HERETO IN CONNECTION WITH ANY OF THE TRANSACTIONS CONTEMPLATED BY THIS REIMBURSEMENT AGREEMENT OR ANY OTHER RELATED DOCUMENT, EACH OF THE PARTIES HERETO HEREBY CONSENTS TO THE ADJUDICATION OF ALL CLAIMS PURSUANT TO JUDICIAL REFERENCE AS PROVIDED IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 638 AND THE COURT SHALL, AND IS HEREBY DIRECTED TO, MAKE A GENERAL REFERENCE PURSUANT TO CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 638 TO A REFEREE (WHO SHALL BE A SINGLE ACTIVE OR RETIRED JUDGE) TO HEAR AND DETERMINE ALL OF THE ISSUES IN SUCH ACTION OR PROCEEDING (WHETHER OF FACT OR OF LAW) AND TO REPORT A STATEMENT OF DECISION, *PROVIDED* THAT AT THE OPTION OF ANY PARTY TO SUCH PROCEEDING, ANY SUCH ISSUES

PERTAINING TO A “PROVISIONAL REMEDY” AS DEFINED IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1281.8 SHALL BE HEARD AND DETERMINED BY THE COURT.

EACH OF THE PARTIES HERETO REPRESENTS THAT EACH HAS REVIEWED THIS WAIVER AND CONSENT AND EACH KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS AND CONSENTS TO JUDICIAL REFERENCE FOLLOWING CONSULTATION WITH LEGAL COUNSEL ON SUCH MATTERS. IN THE EVENT OF LITIGATION, A COPY OF THIS REIMBURSEMENT AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT OR TO JUDICIAL REFERENCE UNDER CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 638 AS PROVIDED HEREIN. THE PROVISIONS OF THIS SECTION 10.13(B) CONSTITUTE A “REFERENCE AGREEMENT” BETWEEN OR AMONG THE PARTIES WITHIN THE MEANING OF AND FOR PURPOSES OF CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 638.

Section 10.14. Government Regulations. The Bank hereby notifies NCPA that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the “Patriot Act”), it is required to obtain, verify and record information that identifies NCPA, which information includes the name and address of NCPA and other information that will allow the Bank to identify NCPA in accordance with the Patriot Act. NCPA agrees to, promptly following a request by the Bank, provide all such other documentation and information reasonably requested by Bank for purposes of compliance with applicable “know your customer” and anti-money laundering rules and regulations, including, without limitation, the Patriot Act.

Section 10.15. Independence. NCPA acknowledges that the rights and obligations of the Bank under the Letter of Credit are independent of the existence, performance or nonperformance of any contract or arrangement underlying the Letter of Credit, including contracts or arrangements between the Bank and NCPA and between NCPA and the beneficiary of the Letter of Credit. The Bank shall have no duty to notify NCPA of its receipt of a Drawing, certificate or other document presented under the Letter of Credit or of its decision to honor a Drawing. The Bank may, without incurring any liability to NCPA or impairing its rights under this Reimbursement Agreement, honor the Letter of Credit despite notice from NCPA of, and without any duty to inquire into, any defense to payment or any adverse claims or other rights against the beneficiary of the Letter of Credit or any other Person. The Bank shall have no duty to request or require the presentation of any document, including any default certificate, not required to be presented under the terms and conditions of the Letter of Credit. The Bank shall have no duty to seek any waiver of discrepancies from NCPA, nor any duty to grant any waiver of discrepancies which NCPA approves or requests.

Section 10.16. Multiple Role Disclosure. The Bank and its Affiliates offer a wide range of financial services, including back-office letter of credit processing services on behalf of financial institutions and letter of credit beneficiaries. Such services are provided internationally to a wide range of customers, some of whom may be NCPA’s counterparties or competitors. NCPA acknowledges and accepts that the Bank and its Affiliates may perform more than one role in relation to a particular transaction.

Section 10.17. No Advisory or Fiduciary Responsibility. In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Related Document), NCPA acknowledges and agrees, and acknowledges its Affiliates' understanding, that: (a) (i) the services regarding this Reimbursement Agreement provided by the Bank and any Affiliate thereof are arm's-length commercial transactions between NCPA, on the one hand, and the Bank and its Affiliates, on the other hand, (ii) NCPA has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (iii) NCPA is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Related Documents; (b) (i) the Bank and its Affiliates each is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary pursuant to Section 15B of the Securities Exchange Act of 1934, for NCPA, or any other Person and (ii) neither the Bank nor any of its Affiliates has any obligation to NCPA with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Related Documents; and (c) the Bank and its Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of NCPA, and neither the Bank nor any of its Affiliates has any obligation to disclose any of such interests to NCPA. To the fullest extent permitted by law, NCPA, hereby waives and releases any claims that it may have against the Bank or any of its Affiliates with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transactions contemplated hereby.

Section 10.18. Dealing with NCPA, the Tender Agent, and/or the Remarketing Agents. The Bank and its Affiliates may accept deposits from, extend credit to and generally engage in any kind of banking, trust or other business with NCPA, the Tender Agent and/or the Remarketing Agent regardless of the capacity of the Bank hereunder.

Section 10.19. No Third-Party Rights. Nothing in this Reimbursement Agreement, whether express or implied, shall be construed to give to any Person other than the parties hereto any legal or equitable right, remedy or claim under or in respect of this Reimbursement Agreement, which is intended for the sole and exclusive benefit of the parties hereto.

Section 10.20. Survival of this Reimbursement Agreement. All covenants, agreements, representations and warranties made in this Reimbursement Agreement shall survive the issuance by the Bank of the Letter of Credit and shall continue in full force and effect so long as the Letter of Credit shall be unexpired or any Obligations shall be outstanding and unpaid.

Section 10.21. Payments Set Aside. To the extent that any payment by or on behalf of NCPA is made to the Bank, or the Bank exercises its right of setoff, and such payment or the proceeds of such setoff or any part thereof is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by the Bank in its discretion) to be repaid to a trustee, receiver or any other party, in connection with any proceeding under any Debtor Relief Law or otherwise, then to the extent of such recovery, the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such setoff had not occurred.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have caused this Letter of Credit Reimbursement Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first above written.

NORTHERN CALIFORNIA POWER AGENCY

By _____
Name: _____
Title: _____

BANK OF AMERICA, N.A.

By _____

Name: Brent Riley

Title: Senior Vice President

APPENDIX I

FORM OF LETTER OF CREDIT

[To come]

IRREVOCABLE TRANSFERABLE LETTER OF CREDIT

**BANK OF AMERICA, N.A.
1 FLEET WAY
PA6-580-02-30
SCRANTON, PENNSYLVANIA 18507**

June [___], 2019
**U.S. [\$90,815,558]
No. _____

U.S. Bank National Association
as Trustee (the "Trustee")
100 Wall Street, Suite 1600
New York, New York 10005

Attention: Corporate Trust Services

Ladies and Gentlemen:

We hereby establish in your favor as Trustee under that certain Indenture of Trust, dated as of March 1, 1985 (the "*Original Indenture*"), as supplemented by that Sixteenth Supplemental Indenture of Trust dated as of April 1, 2008 (the "*Supplemental Indenture*," and together with the Original Indenture and as amended or supplemented from time to time pursuant to its terms, the "*Indenture*"), between Northern California Power Agency (the "*Issuer*") and you, in your capacity as Trustee and as Tender Agent, for the benefit of the holder of the Bonds (as hereinafter defined) our Irrevocable Transferable Letter of Credit No. [_____] (as amended, supplemented, restated or otherwise modified from time to time, this "*Letter of Credit*") for the account of the Issuer, whereby we hereby irrevocably authorize you to draw on us from time to time, from and after the date hereof to and including the earliest to occur of our close of business on: (i) June [___], 2024, (as extended from time to time, the "*Stated Expiration Date*"), (ii) the earlier of (A) the date which is five (5) days following the date on which all of the Bonds bear interest at a rate other than the Weekly Rate, as such date is specified in a certificate in the form of Annex A hereto (the "*Conversion Date*") hereto and (B) the date on which the Bank honors a drawing under the Letter of Credit on or after the Conversion Date, (iii) the date of receipt from you of a certificate in the form set forth as Annex B hereto, (iv) the date on which an Acceleration Drawing or a Stated Maturity Drawing is honored by us and (v) the date which is six (6) days (or if such day is not a Business Day, on the next succeeding Business Day) following receipt by you of a written notice from us in the form of Annex L hereto, specifying the occurrence of an Event of Default under the Letter of Credit Reimbursement Agreement dated as of June 1, 2019 (as amended, supplemented, restated or otherwise modified from time to time, the "*Reimbursement Agreement*"), between the Issuer and Bank of America, N.A. (the "*Bank*"), directing you to cause a mandatory tender of the Bonds (the earliest of the foregoing dates herein referred to as the "*Termination Date*"), a maximum aggregate amount not

exceeding **[\$90,815,558]** (the “*Original Stated Amount*”) to pay the unpaid principal amount of, or a portion of the purchase price corresponding to the principal of, and accrued interest on, the Issuer’s Hydroelectric Project Number One Revenue Bonds 2008 Refunding Series A (the “*Bonds*”), in accordance with the terms hereof (said **[\$90,815,558]** having been calculated to be equal to (A) **[\$85,160,000]**, the original aggregate principal amount of the Bonds, plus (B) **[\$5,655,558]** which is two hundred two (202) days’ accrued interest on said principal amount of the Bonds at the rate of 12% per annum (the “*Cap Interest Rate*”) and assuming a year of 365 days. This credit is available to you against presentation of the following documents (the “*Payment Documents*”) presented to the Bank:

A certificate (with all blanks appropriately completed) (i) in the form attached as Annex C hereto to pay accrued interest on the Bonds (an “*Interest Drawing*”), (ii) in the form attached as Annex D hereto to pay the principal amount of and accrued interest on the Bonds in respect of any redemption of the Bonds (a “*Redemption Drawing*”), (iii) in the form attached as Annex E hereto to pay the purchase price and accrued interest of Bonds tendered for purchase that have not been successfully remarketed or for which the purchase price has not been received by the Trustee (a “*Liquidity Drawing*”); (iv) in the form attached as Annex F hereto to pay the principal of and interest on the Bonds the payment of which has been accelerated pursuant to the terms of the Indenture (an “*Acceleration Drawing*”); or (v) in the form attached as Annex G hereto to pay the principal of and interest on the Bonds maturing on July 1, 2032 (a “*Stated Maturity Drawing*”), each certificate to state therein that it is given by your duly authorized officer and dated the date such certificate is presented hereunder. No Drawings shall be made under this Letter of Credit for (i) Bonds bearing interest at a rate other than the Weekly Rate (“*Converted Bonds*”), (ii) Bonds purchased with the proceeds of a Liquidity Drawing and registered in the name of the Bank or its nominee (the “*Purchased Bonds*”) or (iii) Bonds owned by or on behalf of the Issuer (“*Issuer Bonds*” and, together with the Converted Bonds and the Purchased Bonds, collectively referred to herein as the “*Ineligible Bonds*”). “*Weekly Rate*” means an interest rate that is determined on a weekly basis with respect to the Bonds in the weekly mode pursuant to the Supplemental Indenture.

All drawings shall be made by presentation of each Payment Document at Bank of America, N.A., Scranton, at telecopier number (800) 755-8743, Attention: Standby Letter of Credit Department, without further need of documentation, including the original of this Letter of Credit, it being understood that each Payment Document so submitted is to be the sole operative instrument of drawing. You shall use your best efforts to give telephonic notice of a drawing to the Bank at (800) 370-7519 OPT 1 on the Business Day preceding the day of such drawing (but

such notice shall not be a condition to drawing hereunder and you shall have no liability for not doing so).

We agree to honor and pay the amount of any Interest, Redemption, Liquidity Acceleration or Stated Maturity Drawing if presented in compliance with all of the terms of this Letter of Credit. If any such drawing, other than a Liquidity Drawing, is presented prior to 3:00 P.M., New York time, on a Business Day, payment shall be made, in immediately available funds, by 2:00 P.M., New York time, on the following Business Day. If any such Drawing, other than a Liquidity Drawing, is presented at or after 3:00 P.M., New York time, on a Business Day, payment shall be made, in immediately available funds, by 12:00 P.M., New York time, on the second following Business Day. If a Liquidity Drawing is presented prior to 11:30 A.M., New York time, on a Business Day, payment shall be made, in immediately available funds, by 2:30 P.M., New York time, on the same Business Day. If a Liquidity Drawing is presented at or after 11:30 A.M., New York time, on any Business Day, payment shall be made, in immediately available funds, by 2:30 P.M., New York time, on the following Business Day. Payments made hereunder shall be made by wire transfer of immediately available funds to U.S. Bank National Association, [ABA Number _____, Account Number _____, Attention: _____, re: _____]. “*Business Day*” shall mean any day other than (a) a Saturday or Sunday, (b) day on which banks located in the cities in which the designated office of the Trustee or the Bank (initially, Scranton, Pennsylvania) is located are authorized or required to be closed, or (c) a day on which the New York Stock Exchange is closed.

The Available Amount (as hereinafter defined) of this Letter of Credit will be reduced automatically by the amount of any drawing hereunder; *provided, however*, that the amount of any Interest Drawing hereunder, shall be automatically reinstated effective at 11:00 A.M., New York time, six (6) Business Days from the date such drawing is honored by us unless you receive notice from us in the form of Annex L hereto on the fifth (5th) Business Day after the date we honor such drawing; *provided* that in no event shall such reinstated amount exceed the amount equal to the outstanding principal amount of Bonds at such time plus 202 days’ accrued interest on such principal amount of Bonds at the Cap Interest Rate and assuming a year of 365 days. After payment by the Bank of a Liquidity Drawing, the obligation of the Bank to honor drawings under this Letter of Credit will be automatically reduced by an amount equal to the amount set forth in the certificate in the form of Annex E relating to such Liquidity Drawing. In addition, in the event of the remarketing of the Bonds (or portions thereof) previously purchased with the proceeds of a Liquidity Drawing, the Bank’s obligation to honor drawings hereunder will be automatically reinstated in the amount indicated in a certificate in the form of Annex K attached hereto concurrently upon receipt by the Bank of such certificate and our receipt of funds. The Available Amount under this Letter of Credit will be reduced automatically upon our receipt of Annex H to the amount stated in paragraph 2 therein.

The “*Available Amount*” shall mean the Original Stated Amount (i) less the amount of all prior reductions pursuant to Interest Drawings, Redemption Drawings or Liquidity Drawings, (ii) less the amount of any reduction thereof pursuant to a reduction certificate in the form of Annex H hereto, (iii) plus the amount of all reinstatements as above provided.

Prior to the Termination Date, we may extend the Stated Expiration Date from time to time at the request of the Issuer by delivering to you an amendment to this Letter of Credit in the form of Annex J hereto designating the date to which the Stated Expiration Date is being extended, and thereafter all references in this Letter of Credit to the Stated Expiration Date shall be deemed to be references to the date designated as such in such notice. Any date to which the Stated Expiration Date has been extended as herein provided may be extended in a like manner.

Upon the Termination Date this Letter of Credit shall automatically terminate.

This Letter of Credit is transferable to any transferee whom has succeeded you as Trustee under the Indenture, and may be successively transferred in its entirety. Transfer of the available balance under this Letter of Credit to such transferee shall be effected by the presentation to us of a Transfer Request in the form of Annex I attached hereto signed by the transferor and acknowledged by the transferee (each a "*Transfer*") together with the original Letter of Credit.

Other than the provisions for communication by facsimile copy, communications with respect to this Letter of Credit shall be addressed to us at Bank of America, N.A., 1 Fleet Way, PA6-580-02-30, Scranton, Pennsylvania 18507, Attention: Standby Letter of Credit Department, specifically referring to the number of this Letter of Credit.

To the extent not inconsistent with the express terms hereof, this Letter of Credit shall be governed by, and construed in accordance with, the terms of the International Standby Practices 1998, International Chamber of Commerce-Publication No. 590 ("*ISP98*"). As to matters not governed by the ISP98, this Letter of Credit shall be governed by and construed in accordance with Article 5 of the Uniform Commercial Code of the State of New York, without regard to conflict of laws.

All payments made by us hereunder shall be made from our funds and not with the funds of any other person.

This Letter of Credit sets forth in full the terms of our undertaking, and such undertaking shall not in any way be modified or amended by reference to any other document whatsoever.

BANK OF AMERICA, N.A.

By: _____
Name: _____
Title: _____

**ANNEX A
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

NOTICE OF CONVERSION DATE

[Date]

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

Reference is hereby made to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the "*Letter of Credit*"), which has been established by you for the account of NCPA, in favor of the Trustee.

The undersigned hereby certifies and confirms that on [insert date] (the "*Conversion Date*") the interest mode on all the Bonds has been converted to bear interest at a rate other than the Weekly Rate, and, accordingly, said Letter of Credit shall terminate on _____, 20__, which is five (5) days after such Conversion Date in accordance with its terms.

All defined terms used herein which are not otherwise defined herein shall have the same meaning as in the Letter of Credit.

As Trustee

By _____
[Title of Authorized Officer]

**ANNEX B
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

NOTICE OF TERMINATION

[Date]

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

Reference is hereby made to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the "*Letter of Credit*"), which has been established by you for the account of the NCPA, in favor of the Trustee.

The undersigned hereby certifies and confirms that **[(i) no Bonds (as defined in the Letter of Credit) remain Outstanding within the meaning of the Indenture, (ii) all Drawings required to be made under the Indenture and available under the Letter of Credit have been made and honored or (iii) an [Alternate 2008 Series A Credit Facility][Alternate 2008 Series A Liquidity Facility] (as defined in the Supplemental Indenture) has been issued to replace the Letter of Credit pursuant to the Indenture]** and, accordingly, the Letter of Credit shall be terminated in accordance with its terms.

All defined terms used herein which are not otherwise defined shall have the same meaning as in the Letter of Credit.

as Trustee

By _____
[Title of Authorized Officer]

**ANNEX C
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

INTEREST DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee (as defined in the Letter of Credit) under the Indenture.

2. The Beneficiary is entitled to make this Drawing in the amount of \$_____ under the Letter of Credit pursuant to the Indenture with respect to the payment of interest due on all Bonds Outstanding on the Interest Payment Date (as defined in the Indenture) occurring on [insert applicable date], other than Ineligible Bonds (as defined in the Letter of Credit).

3. The amount of the drawing is equal to the amount required to be drawn by the Trustee pursuant to Section 405(b)(i)(B) of the Supplemental Indenture.

4. The amount of the drawing made by this Certificate was computed in compliance with the terms of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this ____ day of _____, 20____.

as Trustee

By _____
[Title of Authorized Officer]

ANNEX D
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

REDEMPTION DRAWING

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee (as defined in the Letter of Credit) under the Indenture.

2. The Beneficiary is entitled to make this drawing in the amount of \$ _____ under the Letter of Credit pursuant to Section 405(b) of the Supplemental Indenture.

3. (a) The amount of this drawing is equal to (i) the principal amount of Bonds to be redeemed by the Issuer (as defined in the Letter of Credit) pursuant to Section **[401(a)(i)] [401(b)] [401(c)]** of the Supplemental Indenture on [*insert applicable date*] (the “*Redemption Date*”) other than Ineligible Bonds (as defined in the Letter of Credit), *plus* (ii) interest on such Bonds accrued from the immediately preceding Interest Payment Date (as defined in the Indenture) to the Redemption Date, provided that in the event the Redemption Date coincides with an Interest Payment Date this drawing does not include any accrued interest on such Bonds.

(b) Of the amount stated in paragraph 2 above:

(i) \$ _____ is demanded in respect of the principal amount of the Bonds referred to in subparagraph (a) above; and

(ii) **[\$0.00 is demanded in respect of accrued interest on such date (the Redemption Date coincides with an Interest Payment Date)] [\$_____ is demanded in respect of accrued interest on such Bonds (the Redemption Date is not an Interest Payment Date)].**

4. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

5. The amount of the drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

6. Upon payment of the amount drawn hereunder, the Bank is hereby directed to permanently reduce the Available Amount by \$(insert amount of reduction) and the Available Amount shall thereupon equal \$(insert new Available Amount). The Available Amount has been reduced by an amount equal to the principal of Bonds paid with this drawing and an amount equal to ___ days' interest thereon at the Cap Interest Rate (as defined in the Letter of Credit).

7. Of the amount of the reduction stated in paragraph 6 above:

(i) \$_____ is attributable to the principal amount of Bonds redeemed; and

(ii) \$_____ is attributable to interest on such Bonds (*i.e.*, ___ days' interest thereon at the Cap Interest Rate).

8. The amount of the reduction in the Available Amount has been computed in accordance with the provisions of the Letter of Credit.

9. Following the reduction, the Available Amount shall be at least equal to the aggregate principal amount of the Bonds Outstanding (to the extent such Bonds are not Ineligible Bonds (as defined in the Letter of Credit)), plus 202 days' interest thereon at the Cap Interest Rate.

10. In the case of a redemption pursuant to Section 401(a)(i) of the Supplemental Indenture, the Trustee, prior to giving notice of redemption to the owners of the Bonds, received written evidence from the Bank that the Bank has consented to such redemption.

IN WITNESS WHEREOF, this Certificate has been executed this ____ day of _____, _____.

as Trustee

By _____
[Title of Authorized Officer]

ANNEX E
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

LIQUIDITY DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”) hereby certifies as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.

2. The Beneficiary is entitled to make this drawing under the Letter of Credit in the amount of \$ _____ with respect to the payment of the purchase price of Bonds tendered for purchase in accordance with Section **[404(a)] [404(c)] [404(d)]** of the Supplemental Indenture and to be purchased on [insert applicable date] (the “*Purchase Date*”) which Bonds have not been successfully remarketed as provided in the Indenture or the purchase price of which has not been received by the Trustee by 11:00 A.M., New York time, on said Purchase Date.

3. (a) The amount of the drawing is equal to (i) the principal amount of Bonds to be purchased pursuant to the Indenture on the Purchase Date other than Ineligible Bonds (as defined in the Letter of Credit), *plus* (ii) interest on such Bonds accrued from the immediately preceding Interest Payment Date (as defined in the Indenture) (or if none, the date of issuance of the Bonds) to the Purchase Date, provided that in the event the Purchase Date coincides with an Interest Payment Date this drawing does not include any accrued interest on such Bonds.

(b) Of the amount stated in paragraph 2 above:

(i) \$_____ is demanded in respect of the principal portion of the purchase price of the Bonds referred to in paragraph 2 above; and

(ii) **[\$0.00 is demanded in respect of accrued interest on such date (the Purchase Date coincides with an Interest Payment Date)]** [**\$_____ is demanded in respect of payment of the interest portion of the purchase price of such Bonds (the Purchase Date is not an Interest Payment Date)**].

4. The amount of the drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Upon payment of the amount drawn hereunder, the Bank is hereby directed to reduce the Available Amount of the Letter of Credit by **[\$insert amount of reduction]** and the Available Amount shall, after giving effect to such reduction, equal **[\$insert new Available Amount]**.

6. Of the amount of such reduction stated in paragraph 5 above:

(i) \$_____ is attributable to the principal amount of Bonds tendered; and

(ii) \$_____ is attributable to interest on such Bonds (*i.e.*, 202 days' interest at the Cap Interest Rate (as defined in the Letter of Credit)).

7. The Beneficiary will register or cause to be registered in the name of the Bank (or its nominee at the written direction of the Bank), upon payment of the amount drawn hereunder, Bonds in the principal amount of the Bonds being purchased with the amounts drawn hereunder and will deliver such Bonds in accordance with the Indenture.

8. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this _____ day of _____, _____.

as Trustee

By _____

[Title of Authorized Officer]

ANNEX F
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

ACCELERATION DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.

2. An Event of Default has occurred under subsection [insert subsection] of Section 1101 of the Original Indenture and the Trustee has declared the principal of and accrued interest on all Bonds then outstanding immediately due and payable. The Beneficiary is entitled to make this drawing in the amount of \$_____ under the Letter of Credit pursuant to Section 405(B)(ii)(b) of the Supplemental Indenture in order to pay the principal of and interest accrued on the Bonds due to an acceleration thereof in accordance with Section 1101 of the Original Indenture.

3. (a) The amount of this drawing is equal to (i) the principal amount of Bonds outstanding on [insert date of acceleration] (the “*Acceleration Date*”) other than Ineligible Bonds (as defined in the Letter of Credit), plus (ii) interest on such Bonds accrued from the immediately preceding Interest Payment Date (as defined in the Indenture) to the Acceleration Date.

(b) Of the amount stated in paragraph 2 above:

(i) \$_____ is demanded in respect of the principal portion of the Bonds referred to in subparagraph (a) above; and

(ii) **[\$0.00 is demanded in respect of accrued interest on such date (the Acceleration Date coincides with an Interest Payment Date)]**
[\$_____ is demanded in respect of accrued interest on such Bonds (the Acceleration Date is not an Interest Payment Date)].

4. The amount of this drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this ____ day of _____, 20____.

_____, as Trustee

By _____
[Title of Authorized Officer]

**ANNEX G
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

STATED MATURITY DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.
2. The Beneficiary is entitled to make this drawing in the amount of \$_____ under the Letter of Credit pursuant to Section 405(B)(i)(b) of the Supplemental Indenture.
3. (a) The amount of this drawing is equal to the principal of and interest on the Bonds Outstanding on _____, 20__, the maturity date thereof as specified in Section 401(c) of the Supplemental Indenture, other than Ineligible Bonds (as defined in the Letter of Credit).

(b) Of the amount stated in paragraph (2) above:
 - (i) \$_____ is demanded in respect of the principal portion of the Bonds referred to in subparagraph (2) above; and
 - (ii) **[\$0.00 is demanded in respect of accrued interest on such date (the maturity date coincides with an Interest Payment Date)]** [\$_____ is demanded in respect of payment of the interest portion of such Bonds (the maturity date is not an Interest Payment Date)].

4. The amount of this Drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this _____ day of _____,
_____.

as Trustee

By _____
[Title of Authorized Officer]

ANNEX H
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

REDUCTION CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned hereby certifies with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the "*Letter of Credit*"), issued by Bank of America, N.A. (the "*Bank*") in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.

2. Upon receipt by the Bank of this Certificate, the Available Amount (as defined in the Letter of Credit) shall be reduced by \$_____ and the Available Amount shall thereupon equal \$_____. \$_____ of the new Available Amount is attributable to interest and \$_____ of the new Available Amount is attributable to principal.

3. The amount of the reduction in the Available Amount has been computed in accordance with the provisions of the Letter of Credit.

4. Following the reduction, the Available Amount shall be at least equal to the aggregate principal amount of the Bonds Outstanding (other than Ineligible Bonds (as defined in the Letter of Credit)) plus \$_____ which is at least 202 days' accrued interest on said principal amount of the Bonds at the Cap Interest Rate (as defined in the Letter of Credit) and assuming a year of 365 days.

IN WITNESS WHEREOF, this Certificate has been executed this _____ day of _____, _____.

as Trustee

By _____
[Title of Authorized Officer]

**ANNEX I
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

TRANSFER CERTIFICATE

[Date]

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Re: Bank of America Irrevocable Transferable Letter of Credit
No. _____ dated June [__], 2019

We, the undersigned "Transferor", hereby irrevocably transfer all of our rights to draw under the above referenced Letter of Credit (as amended, the "*Letter of Credit*") in its entirety to:

NAME OF TRANSFEREE

(Print Name and complete address of the Transferee)

"Transferee"

ADDRESS OF TRANSFEREE

CITY/STATE/COUNTRY ZIP

(the "*Transferee*") all rights of the Transferor with respect to the above-referenced Letter of Credit, including the right to draw under said Letter of Credit in the amount of the full unutilized balance thereof. Said Transferee has succeeded the Transferor as Trustee under that certain Indenture of Trust, dated as of March 1, 1985 (the "*Original Indenture*"), as supplemented by that Sixteenth Supplemental Indenture of Trust dated as of April 1, 2008 (the "*Supplemental Indenture*," and together with the Original Indenture and as amended or supplemented from time to time pursuant to its terms, the "*Indenture*"), between Northern California Power Agency (the "*Issuer*") and U.S. Bank National Association, in its capacity as Trustee and as Tender Agent, with respect to Northern California Power Agency Hydroelectric Project Number One Revenue Bonds 2008 Refunding Series A, issued by the Issuer.

By virtue of this transfer, the Transferee shall have the sole rights as beneficiary of said Letter of Credit, including sole rights relating to any past or future amendments thereof, whether increases or extensions or otherwise. All amendments are to be advised directly to the Transferee without necessity of any consent of or notice to the Transferor.

By its signature below, the Transferee acknowledges that it has duly succeeded the Transferor as Trustee under the Indenture, and agrees to be bound by the terms of the Indenture as if it were the original Trustee thereunder.

The Letter of Credit is returned herewith, and we ask you to endorse the transfer on the reverse thereof and to forward it directly to the Transferee with your customary notice of transfer.

Very truly yours,

[Insert Name of Trustee],
as Trustee

By: _____
[Insert name and title of authorized officer]

SIGNATURE OF THE ABOVE OFFICER,
DULY AUTHORIZED TO ACT ON
BEHALF OF [insert name of
Trustee], AUTHENTICATED BY:

By: _____
Name: _____
Title: _____

Acknowledged by
[insert name of Transferee]
as Transferee and successor Trustee

By: _____
Name: _____
Title: _____

SIGNATURE OF THE ABOVE OFFICER
DULY AUTHORIZED TO ACT ON BEHALF
OF [insert name of Transferee], AUTHENTICATED BY:

By: _____
Name: _____
Title: _____

**ANNEX J
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

NOTICE OF EXTENSION

_____, _____

U.S. Bank National Association
as Trustee (the “*Trustee*”)
100 Wall Street, Suite 1600
New York, New York 10005
Attention: Corporate Trust Services

Ladies and Gentlemen:

Reference is hereby made to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the “*Letter of Credit*”), established by us in your favor as Beneficiary. We hereby notify you that, in accordance with the terms of the Letter of Credit, the Stated Expiration Date (as defined in the Letter of Credit) has been extended to _____.

This letter shall be attached to the Letter of Credit and made a part thereof.

BANK OF AMERICA, N.A.

By _____
Name: _____
Title: _____

ANNEX K
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

NOTICE OF REMARKETING

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned, a duly authorized officer of U.S. Bank National Association (the “Trustee”), hereby notifies Bank of America, N.A. (the “Bank”), with reference to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “Letter of Credit”; terms defined therein and not otherwise defined herein shall have the meanings set forth in the Letter of Credit) issued by the Bank in favor of the Trustee as follows:

1. _____ is the Remarketing Agent under the Indenture for the holders of the Bonds.

2. The Trustee has paid the amount of \$_____ to the Bank today on behalf of the Issuer, which is a payment made to reimburse the Bank, pursuant to the Reimbursement Agreement, for amounts (or portions thereof) drawn under the Letter of Credit pursuant to a Liquidity Drawing.

3. Of the amount referred to in paragraph 2, \$_____ represents the aggregate principal amount of Purchased Bonds resold or to be resold on behalf of the Issuer.

4. Of the amount referred to in paragraph 2, \$_____ represents accrued and unpaid interest on such Purchased Bonds.

IN WITNESS WHEREOF, the Trustee has executed and delivered this Certificate as of this
_____ day of _____, _____.

[INSERT NAME OF TRUSTEE],
as Trustee

By _____
Name: _____
Title: _____

ANNEX L
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT
No. _____

NOTICE OF MANDATORY TENDER

[DATE]

U.S. Bank National Association
as Trustee (the “Trustee”)
100 Wall Street, Suite 1600
New York, New York 10005
Attention: Corporate Trust Services

Ladies and Gentlemen:

The undersigned, a duly authorized officer of Bank of America, N.A. (the “Bank”), hereby advises you, with reference to Irrevocable Transferable Letter of Credit No. _____, dated June [___], 2019 (as amended, the “Letter of Credit”; any capitalized term used herein and not defined shall have its respective meaning as set forth in the Letter of Credit) issued by the Bank in your favor, that:

[Insert one of the following paragraphs as appropriate]

[An “Event of Default” has occurred under the Reimbursement Agreement and the Bank has elected to direct the Trustee to cause a mandatory tender of the Bonds pursuant to the Indenture, whereby the Letter of Credit will terminate _____ (6) days following the receipt by the Trustee of this Notice of Mandatory Tender [insert date that is 6 days from beneficiary’s receipt of this notice or, if such day is not a Business Day, the next succeeding Business Day].]

[An “Event of Default” has occurred under the Reimbursement Agreement and, as a result thereof, the amount of the Interest Drawing will not be reinstated and the Bank has elected to direct the Trustee to cause a mandatory tender of the Bonds pursuant to the Indenture, whereby the Letter of Credit will terminate _____ (6) days following the receipt by the Trustee of this Notice of Mandatory Tender [insert date that is 6 days from beneficiary’s receipt of this notice or, if such day is not a Business Day, the next succeeding Business Day].]

BANK OF AMERICA, N.A.

By _____

Name: _____

Title: _____

EXHIBIT A

**FORM OF REQUEST FOR EXTENSION
REQUEST FOR EXTENSION**

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507
Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

Reference is hereby made to that certain Letter of Credit Reimbursement Agreement, dated as of June 1, 2019 (the "*Reimbursement Agreement*"), between Northern California Power Agency ("*NCPA*") and Bank of America, N.A. All capitalized terms contained herein which are not specifically defined shall be deemed to have the definition set forth in the Reimbursement Agreement. NCPA hereby requests, pursuant to Section 9.02 of the Reimbursement Agreement, that the Stated Expiration Date for the Letter of Credit be extended by [IDENTIFY APPROPRIATE PERIOD]. NCPA hereby represents and warrants that:

- (a) no Default or Event of Default has occurred and is continuing except as noted below;
- (b) no Material Litigation is pending;
- (c) no event has occurred and is continuing which has or is having a Material Adverse Effect; and
- (d) all representations and warranties of NCPA in the Reimbursement Agreement are true and correct and are deemed to be made on the date hereof.

We have enclosed along with this request the following information:

1. The outstanding principal amount of the Bonds;
2. The nature of any and all Defaults and Events of Default that have occurred and are continuing; and
3. Any other pertinent information previously requested by the Bank.

The Bank is requested to notify NCPA of its decision with respect to this request for extension within 30 days of the date of receipt hereof. If the Bank fails to notify NCPA of its decision within such 30-day period, the Bank shall be deemed to have rejected such request.

Very truly yours,

NORTHERN CALIFORNIA POWER AGENCY

By _____
Name _____
Title _____

cc: _____

EXHIBIT B

FORM OF CUSTODY AGREEMENT

[To come]

EXHIBIT C

MEMBER GOVERNMENTS AND PROJECT PARTICIPANTS

MEMBER GOVERNMENTS

Alameda
Biggs
Gridley
Healdsburg
Lodi
Lompoc
Palo Alto
Roseville
Santa Clara
Ukiah
Plumas-Sierra Rural Electric Cooperative (Associate Member)
Port of Oakland
Redding
San Francisco Bay Area Rapid Transit District (BART)
Truckee-Donner Public Utility District

PROJECT PARTICIPANTS

Alameda *	10.00%
Biggs	0.10%
Gridley	1.06%
Healdsburg	1.66%
Lodi *	10.37%
Lompoc	2.30%
Palo Alto *	22.92%
Roseville *	12.00*%
Santa Clara *	35.86%
Ukiah	2.04%
Plumas-Sierra Rural Electric Cooperative	1.69%

*Significant Share Project Participant

FEE LETTER
DATED JUNE [], 2019

Reference is hereby made to (i) the Letter of Credit Reimbursement Agreement dated as of June 1, 2019 (as amended, supplemented, modified or restated from time to time, the “*Agreement*”), between NORTHERN CALIFORNIA POWER AGENCY (“*NCPA*”) and BANK OF AMERICA, N.A. (the “*Bank*”), relating to NCPA’s Hydroelectric Project Number One Revenue Bonds 2008 Refunding Series A (the “*Bonds*”) and (ii) the Irrevocable Transferable Letter of Credit No. [] dated the date hereof (the “*Letter of Credit*”), issued by the Bank pursuant to the Agreement, supporting the Bonds. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Agreement or the Letter of Credit, as applicable.

The purpose of this Fee Letter is to confirm the agreement between the Bank and NCPA with respect to, among other things, the Letter of Credit Fees (as defined below) and certain other fees payable to the Bank. This Fee Letter is the Fee Letter referenced in the Agreement. This Fee Letter and the Agreement are to be construed as one agreement between NCPA and the Bank, and all obligations hereunder are to be construed as obligations thereunder. All references to amounts due and payable under the Agreement will be deemed to include all amounts, fees and expenses payable under this Fee Letter.

ARTICLE I. FEES AND OTHER AGREEMENTS.

Section 1.1. Letter of Credit Fees. NCPA agrees to pay or cause to be paid to the Bank on July 1, 2019, for the period commencing on the Closing Date and ending on June 30, 2019, and in arrears on the first Business Day of each October, January, April and July occurring thereafter to the Termination Date, and on the Termination Date, a non-refundable letter of credit fee (the “*Letter of Credit Fees*”) in an amount equal to the product of the letter of credit fee rate as specified in the applicable Level set forth below (the “*Letter of Credit Fee Rate*”) during each related period multiplied by the Stated Amount (without regard to any temporary reductions of the Stated Amount) for each day during each period in respect of which payment is to be made.

LEVEL	MOODY’S RATING	S&P RATING	FITCH RATING	LETTER OF CREDIT FEE RATE
Level 1	A1 or above	A+ or above	A+ or above	0.35%
Level 2	A2	A	A	0.45%
Level 3	A3	A-	A-	0.55%
Level 4	Baa1	BBB+	BBB+	0.65%
Level 5	Baa2 or below	BBB or below	BBB or below	0.75%

The applicable Level shall be the Level corresponding to the lowest long-term unenhanced debt ratings assigned by Moody’s, S&P and Fitch to Parity Debt. In the event that any rating on Parity Debt is suspended, withdrawn or otherwise unavailable (and, for purposes of

clarity, as a result of credit related reasons) from any Rating Agency and upon the occurrence and during the continuance of an Event of Default, the Letter of Credit Fee Rate shall immediately and without notice increase by an additional 1.50% from the Letter of Credit Fee Rate otherwise in effect on the date of such withdrawal, suspension, unavailability or otherwise in effect during such Event of Default, commencing on the date such withdrawal, suspension, unavailability or Event of Default occurs and such increased Letter of Credit Fee Rate shall be payable until such withdrawal, suspension or other unavailability, or Event of Default, as applicable, is cured or the Letter of Credit otherwise terminates. Any change in the Letter of Credit Fee Rate resulting from a change in any rating on Parity Debt or any of the other events described above shall be and become effective as of and on the date of the announcement of the change in such rating or the occurrence of any such other event. References to ratings above are references to rating categories as presently determined by the Rating Agencies and in the event of adoption of any new or changed rating system by any such Rating Agency, including, without limitation, any recalibration or realignment of the Bonds in connection with the adoption of a “global” rating scale, each of the ratings from the Rating Agency in question referred to above shall be deemed to refer to the rating category under the new rating system which most closely approximates the applicable rating category as currently in effect. NCPA and the Bank acknowledge that as of the Closing Date the Letter of Credit Fee Rate is that specified above for Level 1 above. The Letter of Credit Fees shall be payable quarterly in arrears, together with interest on the Letter of Credit Fees from the date payment is due until payment in full at the Default Rate. The Letter of Credit Fees will be payable in immediately available funds and computed on the basis of a 360-day year and the actual number of days elapsed.

Section 1.2. Drawing Fee. NCPA agrees to pay to the Bank, on the date of each Drawing under the Letter of Credit, a non-refundable drawing fee (“*Draw Fee*”) of \$250 for each such Drawing.

Section 1.3. Transfer Fee. Upon each transfer of the Letter of Credit in accordance with its terms, NCPA agrees to pay to the Bank a non-refundable transfer fee in an amount equal to \$2,500 (or such greater amount as proposed by the Bank and agreed to by NCPA), plus, in each case, the reasonable fees and expenses of counsel to the Bank, payable on the date of such transfer.

Section 1.4. Amendment Fee, etc. NCPA agrees to pay to the Bank a non-refundable amendment, standard waiver or consent fee, as applicable, in the amount of \$2,500 (or such greater amount as proposed by the Bank and agreed to by NCPA) on the date of each amendment, supplement or modification to the Agreement, the Letter of Credit or this Fee Letter or in connection with any amendment, supplement or modification of any other Related Document which requires the consent of the Bank or in connection with any standard waiver by the Bank requested by NCPA with respect to the Agreement, the Letter of Credit, this Fee Letter or any other Related Document, plus, in each case, the reasonable fees and expenses of counsel to the Bank.

Section 1.5. Termination Fee; Reduction Fee. (a) Notwithstanding any provision of the Agreement, this Fee Letter or any other Related Document to the contrary, NCPA agrees not to terminate, permanently reduce or replace the Letter of Credit prior to the two (2) year anniversary

of the Closing Date, except upon (i) the payment by NCPA to the Bank of the Termination Fee or a Reduction Fee, as described below, (ii) with respect to the termination or permanent reduction in full of the Letter of Credit, the payment by NCPA to the Bank of all Obligations payable under the Agreement and this Fee Letter and (iii) NCPA providing the Bank with not less than thirty (30) days prior written notice of its intent to terminate or reduce the Letter of Credit; *provided*, that any such termination of the Letter of Credit shall be in compliance with the terms and conditions of the Indenture.

NCPA agrees that all payments to the Bank referred to in the preceding paragraph shall be made in immediately available funds.

(b) NCPA hereby agrees to pay to the Bank a Termination Fee in connection with the termination or replacement of the Letter of Credit by NCPA prior to the two (2) year anniversary of the Closing Date as set forth in Section 1.5(a) hereof in an amount equal to the difference between (x) the product of (A) the Letter of Credit Fee Rate in effect pursuant to Section 1.1 hereof on the date of termination, (B) the Stated Amount of the Letter of Credit as of the Closing Date, and (C) a fraction, the numerator of which is equal to the number of days from and including the date of such termination to and including the two (2) year anniversary of the Closing Date and the denominator of which is 360 and (y) any amounts previously paid pursuant to Section 1.5(c) hereof (the "*Termination Fee*"), payable on the date the Letter of Credit is terminated or replaced; *provided, however*, that no such Termination Fee shall be payable if the Letter of Credit is terminated or replaced (i) following a reduction of any of the Bank's senior unsecured short-term ratings below "A-1" (or its equivalent), "P-1" (or its equivalent) or "F1" (or its equivalent), by any two of S&P, Moody's or Fitch, respectively, (ii) after the Bank requests and NCPA pays any increased costs payments pursuant to Section 2.06 of the Agreement or (iii) as a result of the Bonds being redeemed, refunded or the rate of interest on the Bonds being converted to a fixed rate or another interest rate mode that, in any such financing or refinancing, does not involve the delivery of a credit facility or liquidity facility or a direct purchase of the Bonds by a bank or other financial institution.

(c) NCPA hereby agrees to pay to the Bank a reduction fee in connection with each and every permanent reduction of the Stated Amount of the Letter of Credit by NCPA prior to the two (2) year anniversary of the Closing Date as set forth in Section 1.5(a) hereof in an amount equal to the product of (A) the Letter of Credit Fee Rate in effect pursuant to Section 1.1 hereof on the date of such permanent reduction, (B) the difference between the Stated Amount prior to such permanent reduction and the Stated Amount after such permanent reduction, and (C) a fraction, the numerator of which is equal to the number of days from and including the date of such permanent reduction to and including the two (2) year anniversary of the Closing Date and the denominator of which is 360 (the "*Reduction Fee*"), payable on the date the Stated Amount of the Letter of Credit is permanently reduced; *provided, however*, that no such Reduction Fee shall be payable if the Letter of Credit is permanently reduced (i) following a reduction of any of the Bank's senior unsecured short-term ratings below "A-1" (or its equivalent), "P-1" (or its equivalent) or "F1" (or its equivalent), by any two of S&P, Moody's or Fitch, respectively, (ii) after the Bank requests and NCPA pays any increased costs payments pursuant to Section 2.06 of the Agreement or (iii) as a result of the Bonds being redeemed, refunded or the rate of interest on the Bonds being converted to a fixed rate or another interest rate mode that, in any such financing

or refinancing, does not involve the delivery of a credit facility or liquidity facility or a direct purchase of the Bonds by a bank or other financial institution.

Section 1.5. Payments. Any payments received by the Bank later than 3:30 p.m. New York, New York time on any day shall be deemed to have been paid on the next succeeding Business Day. All payments to the Bank hereunder shall be made in U.S. Dollars and in immediately available funds. Unless the Bank shall otherwise direct, all such payments shall be made by means of wire transfer of funds to the Bank through the Federal Reserve Wire System to the Federal Reserve Bank of New York pursuant to the following instructions:

Bank:	Bank of America, N.A.
ABA:	026009593
Credit:	Scranton-Standby Unit
Account No.:	45358 83980
Reference:	Northern California Power Agency, LC# [_____]

or pursuant to such other direction as the Bank may specify in writing from time to time (the “*Payment Instructions*”).

ARTICLE II. MISCELLANEOUS.

Section 2.1. Out-of-Pocket Expenses. NCPA shall pay, or cause to be paid, on demand (i) the fees of counsel for the Bank in an amount not to exceed \$45,000, plus disbursements, in connection with the execution and delivery of the Agreement, the Letter of Credit and this Fee Letter and (ii) the reasonable out-of-pocket costs and expenses of the Bank incurred in connection with the negotiation, preparation, execution and delivery of this Fee Letter, the Agreement and the other documents described herein, and the ongoing administration thereof. Legal fees shall be paid directly to the Bank’s counsel, Chapman and Cutler LLP, in accordance with the instructions provided by Chapman and Cutler LLP.

Section 2.2. Amendments. No amendment to this Fee Letter shall become effective without the prior written consent of NCPA and the Bank.

Section 2.3. Governing Law. THIS FEE LETTER SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REFERENCE TO PRINCIPLES OF CONFLICTS OF LAWS (OTHER THAN NEW YORK GENERAL OBLIGATIONS LAWS 5-1401 AND 5-1402), PROVIDED THAT THE AUTHORITY OF NCPA TO ENTER INTO THIS FEE LETTER AND THE OBLIGATIONS OF NCPA HEREUNDER SHALL BE GOVERNED BY THE LAWS OF THE STATE OF CALIFORNIA. TO THE EXTENT THAT THE BANK HAS GREATER RIGHTS OR REMEDIES UNDER FEDERAL LAW, THIS SECTION WILL NOT BE DEEMED TO DEPRIVE THE BANK OF SUCH RIGHTS AND REMEDIES AS MAY BE AVAILABLE UNDER FEDERAL LAW.

Section 2.4. Counterparts. This Fee Letter may be executed in multiple counterparts, each of which shall constitute an original but both of which, when taken together, shall constitute but one instrument.

Section 2.5. Severability. Any provision of this Fee Letter which is prohibited, unenforceable or not authorized in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition, unenforceability or non-authorization without invalidating the remaining provisions hereof or affecting the validity, enforceability or legality of such provision in any other jurisdiction, and the remaining portion of such provision and all other remaining provisions will be construed to render them enforceable to the fullest extent.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Fee Letter to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first set forth above.

NORTHERN CALIFORNIA POWER AGENCY

By _____
Name _____
Title _____

BANK OF AMERICA, N.A.

By: _____

Name: Brent Riley

Title: Senior Vice President

IRREVOCABLE TRANSFERABLE LETTER OF CREDIT

**BANK OF AMERICA, N.A.
1 FLEET WAY
PA6-580-02-30
SCRANTON, PENNSYLVANIA 18507**

June [___], 2019
**U.S. [\$90,815,558]
No. _____

U.S. Bank National Association
as Trustee (the “Trustee”)
100 Wall Street, Suite 1600
New York, New York 10005

Attention: Corporate Trust Services

Ladies and Gentlemen:

We hereby establish in your favor as Trustee under that certain Indenture of Trust, dated as of March 1, 1985 (the “*Original Indenture*”), as supplemented by that Sixteenth Supplemental Indenture of Trust dated as of April 1, 2008 (the “*Supplemental Indenture*,” and together with the Original Indenture and as amended or supplemented from time to time pursuant to its terms, the “*Indenture*”), between Northern California Power Agency (the “*Issuer*”) and you, in your capacity as Trustee and as Tender Agent, for the benefit of the holder of the Bonds (as hereinafter defined) our Irrevocable Transferable Letter of Credit No. [_____] (as amended, supplemented, restated or otherwise modified from time to time, this “*Letter of Credit*”) for the account of the Issuer, whereby we hereby irrevocably authorize you to draw on us from time to time, from and after the date hereof to and including the earliest to occur of our close of business on: (i) June [___], 2024, (as extended from time to time, the “*Stated Expiration Date*”), (ii) the earlier of (A) the date which is five (5) days following the date on which all of the Bonds bear interest at a rate other than the Weekly Rate, as such date is specified in a certificate in the form of Annex A hereto (the “*Conversion Date*”) hereto and (B) the date on which the Bank honors a drawing under the Letter of Credit on or after the Conversion Date, (iii) the date of receipt from you of a certificate in the form set forth as Annex B hereto, (iv) the date on which an Acceleration Drawing or a Stated Maturity Drawing is honored by us and (v) the date which is six (6) days (or if such day is not a Business Day, on the next succeeding Business Day) following receipt by you of a written notice from us in the form of Annex L hereto, specifying the occurrence of an Event of Default under the Letter of Credit Reimbursement Agreement dated as of June 1, 2019 (as amended, supplemented, restated or otherwise modified from time to time, the “*Reimbursement Agreement*”), between the Issuer and Bank of America, N.A. (the “*Bank*”), directing you to cause a mandatory tender of the Bonds (the earliest of the foregoing dates herein referred to as the “*Termination Date*”), a maximum aggregate amount not

exceeding **[\$90,815,558]** (the “*Original Stated Amount*”) to pay the unpaid principal amount of, or a portion of the purchase price corresponding to the principal of, and accrued interest on, the Issuer’s Hydroelectric Project Number One Revenue Bonds 2008 Refunding Series A (the “*Bonds*”), in accordance with the terms hereof (said **[\$90,815,558]** having been calculated to be equal to (A) **[\$85,160,000]**, the original aggregate principal amount of the Bonds, plus (B) **[\$5,655,558]** which is two hundred two (202) days’ accrued interest on said principal amount of the Bonds at the rate of 12% per annum (the “*Cap Interest Rate*”) and assuming a year of 365 days. This credit is available to you against presentation of the following documents (the “*Payment Documents*”) presented to the Bank:

A certificate (with all blanks appropriately completed) (i) in the form attached as Annex C hereto to pay accrued interest on the Bonds (an “*Interest Drawing*”), (ii) in the form attached as Annex D hereto to pay the principal amount of and accrued interest on the Bonds in respect of any redemption of the Bonds (a “*Redemption Drawing*”), (iii) in the form attached as Annex E hereto to pay the purchase price and accrued interest of Bonds tendered for purchase that have not been successfully remarketed or for which the purchase price has not been received by the Trustee (a “*Liquidity Drawing*”); (iv) in the form attached as Annex F hereto to pay the principal of and interest on the Bonds the payment of which has been accelerated pursuant to the terms of the Indenture (an “*Acceleration Drawing*”); or (v) in the form attached as Annex G hereto to pay the principal of and interest on the Bonds maturing on July 1, 2032 (a “*Stated Maturity Drawing*”), each certificate to state therein that it is given by your duly authorized officer and dated the date such certificate is presented hereunder. No Drawings shall be made under this Letter of Credit for (i) Bonds bearing interest at a rate other than the Weekly Rate (“*Converted Bonds*”), (ii) Bonds purchased with the proceeds of a Liquidity Drawing and registered in the name of the Bank or its nominee (the “*Purchased Bonds*”) or (iii) Bonds owned by or on behalf of the Issuer (“*Issuer Bonds*” and, together with the Converted Bonds and the Purchased Bonds, collectively referred to herein as the “*Ineligible Bonds*”). “*Weekly Rate*” means an interest rate that is determined on a weekly basis with respect to the Bonds in the weekly mode pursuant to the Supplemental Indenture.

All drawings shall be made by presentation of each Payment Document at Bank of America, N.A., Scranton, at telecopier number (800) 755-8743, Attention: Standby Letter of Credit Department, without further need of documentation, including the original of this Letter of Credit, it being understood that each Payment Document so submitted is to be the sole operative instrument of drawing. You shall use your best efforts to give telephonic notice of a drawing to the Bank at (800) 370-7519 OPT 1 on the Business Day preceding the day of such drawing (but

such notice shall not be a condition to drawing hereunder and you shall have no liability for not doing so).

We agree to honor and pay the amount of any Interest, Redemption, Liquidity Acceleration or Stated Maturity Drawing if presented in compliance with all of the terms of this Letter of Credit. If any such drawing, other than a Liquidity Drawing, is presented prior to 3:00 P.M., New York time, on a Business Day, payment shall be made, in immediately available funds, by 2:00 P.M., New York time, on the following Business Day. If any such Drawing, other than a Liquidity Drawing, is presented at or after 3:00 P.M., New York time, on a Business Day, payment shall be made, in immediately available funds, by 12:00 P.M., New York time, on the second following Business Day. If a Liquidity Drawing is presented prior to 11:30 A.M., New York time, on a Business Day, payment shall be made, in immediately available funds, by 2:30 P.M., New York time, on the same Business Day. If a Liquidity Drawing is presented at or after 11:30 A.M., New York time, on any Business Day, payment shall be made, in immediately available funds, by 2:30 P.M., New York time, on the following Business Day. Payments made hereunder shall be made by wire transfer of immediately available funds to U.S. Bank National Association, [ABA Number _____, Account Number _____, Attention: _____, re: _____]. “*Business Day*” shall mean any day other than (a) a Saturday or Sunday, (b) day on which banks located in the cities in which the designated office of the Trustee or the Bank (initially, Scranton, Pennsylvania) is located are authorized or required to be closed, or (c) a day on which the New York Stock Exchange is closed.

The Available Amount (as hereinafter defined) of this Letter of Credit will be reduced automatically by the amount of any drawing hereunder; *provided, however*, that the amount of any Interest Drawing hereunder, shall be automatically reinstated effective at 11:00 A.M., New York time, six (6) Business Days from the date such drawing is honored by us unless you receive notice from us in the form of Annex L hereto on the fifth (5th) Business Day after the date we honor such drawing; *provided* that in no event shall such reinstated amount exceed the amount equal to the outstanding principal amount of Bonds at such time plus 202 days’ accrued interest on such principal amount of Bonds at the Cap Interest Rate and assuming a year of 365 days. After payment by the Bank of a Liquidity Drawing, the obligation of the Bank to honor drawings under this Letter of Credit will be automatically reduced by an amount equal to the amount set forth in the certificate in the form of Annex E relating to such Liquidity Drawing. In addition, in the event of the remarketing of the Bonds (or portions thereof) previously purchased with the proceeds of a Liquidity Drawing, the Bank’s obligation to honor drawings hereunder will be automatically reinstated in the amount indicated in a certificate in the form of Annex K attached hereto concurrently upon receipt by the Bank of such certificate and our receipt of funds. The Available Amount under this Letter of Credit will be reduced automatically upon our receipt of Annex H to the amount stated in paragraph 2 therein.

The “*Available Amount*” shall mean the Original Stated Amount (i) less the amount of all prior reductions pursuant to Interest Drawings, Redemption Drawings or Liquidity Drawings, (ii) less the amount of any reduction thereof pursuant to a reduction certificate in the form of Annex H hereto, (iii) plus the amount of all reinstatements as above provided.

Prior to the Termination Date, we may extend the Stated Expiration Date from time to time at the request of the Issuer by delivering to you an amendment to this Letter of Credit in the form of Annex J hereto designating the date to which the Stated Expiration Date is being extended, and thereafter all references in this Letter of Credit to the Stated Expiration Date shall be deemed to be references to the date designated as such in such notice. Any date to which the Stated Expiration Date has been extended as herein provided may be extended in a like manner.

Upon the Termination Date this Letter of Credit shall automatically terminate.

This Letter of Credit is transferable to any transferee whom has succeeded you as Trustee under the Indenture, and may be successively transferred in its entirety. Transfer of the available balance under this Letter of Credit to such transferee shall be effected by the presentation to us of a Transfer Request in the form of Annex I attached hereto signed by the transferor and acknowledged by the transferee (each a "*Transfer*") together with the original Letter of Credit.

Other than the provisions for communication by facsimile copy, communications with respect to this Letter of Credit shall be addressed to us at Bank of America, N.A., 1 Fleet Way, PA6-580-02-30, Scranton, Pennsylvania 18507, Attention: Standby Letter of Credit Department, specifically referring to the number of this Letter of Credit.

To the extent not inconsistent with the express terms hereof, this Letter of Credit shall be governed by, and construed in accordance with, the terms of the International Standby Practices 1998, International Chamber of Commerce-Publication No. 590 ("*ISP98*"). As to matters not governed by the ISP98, this Letter of Credit shall be governed by and construed in accordance with Article 5 of the Uniform Commercial Code of the State of New York, without regard to conflict of laws.

All payments made by us hereunder shall be made from our funds and not with the funds of any other person.

This Letter of Credit sets forth in full the terms of our undertaking, and such undertaking shall not in any way be modified or amended by reference to any other document whatsoever.

BANK OF AMERICA, N.A.

By: _____
Name: _____
Title: _____

**ANNEX A
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

NOTICE OF CONVERSION DATE

[Date]

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

Reference is hereby made to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the "*Letter of Credit*"), which has been established by you for the account of NCPA, in favor of the Trustee.

The undersigned hereby certifies and confirms that on [insert date] (the "*Conversion Date*") the interest mode on all the Bonds has been converted to bear interest at a rate other than the Weekly Rate, and, accordingly, said Letter of Credit shall terminate on _____, 20__, which is five (5) days after such Conversion Date in accordance with its terms.

All defined terms used herein which are not otherwise defined herein shall have the same meaning as in the Letter of Credit.

As Trustee

By _____
[Title of Authorized Officer]

**ANNEX B
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

NOTICE OF TERMINATION

[Date]

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

Reference is hereby made to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the "*Letter of Credit*"), which has been established by you for the account of the NCPA, in favor of the Trustee.

The undersigned hereby certifies and confirms that **[(i) no Bonds (as defined in the Letter of Credit) remain Outstanding within the meaning of the Indenture, (ii) all Drawings required to be made under the Indenture and available under the Letter of Credit have been made and honored or (iii) an [Alternate 2008 Series A Credit Facility][Alternate 2008 Series A Liquidity Facility] (as defined in the Supplemental Indenture) has been issued to replace the Letter of Credit pursuant to the Indenture]** and, accordingly, the Letter of Credit shall be terminated in accordance with its terms.

All defined terms used herein which are not otherwise defined shall have the same meaning as in the Letter of Credit.

as Trustee

By _____
[Title of Authorized Officer]

**ANNEX C
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

INTEREST DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee (as defined in the Letter of Credit) under the Indenture.

2. The Beneficiary is entitled to make this Drawing in the amount of \$_____ under the Letter of Credit pursuant to the Indenture with respect to the payment of interest due on all Bonds Outstanding on the Interest Payment Date (as defined in the Indenture) occurring on [insert applicable date], other than Ineligible Bonds (as defined in the Letter of Credit).

3. The amount of the drawing is equal to the amount required to be drawn by the Trustee pursuant to Section 405(b)(i)(B) of the Supplemental Indenture.

4. The amount of the drawing made by this Certificate was computed in compliance with the terms of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this ____ day of _____, 20____.

as Trustee

By _____
[Title of Authorized Officer]

ANNEX D
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

REDEMPTION DRAWING

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “Beneficiary”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “Letter of Credit”), issued by Bank of America, N.A. (the “Bank”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee (as defined in the Letter of Credit) under the Indenture.

2. The Beneficiary is entitled to make this drawing in the amount of \$ _____ under the Letter of Credit pursuant to Section 405(b) of the Supplemental Indenture.

3. (a) The amount of this drawing is equal to (i) the principal amount of Bonds to be redeemed by the Issuer (as defined in the Letter of Credit) pursuant to Section **[401(a)(i)] [401(b)] [401(c)]** of the Supplemental Indenture on [insert applicable date] (the “Redemption Date”) other than Ineligible Bonds (as defined in the Letter of Credit), *plus* (ii) interest on such Bonds accrued from the immediately preceding Interest Payment Date (as defined in the Indenture) to the Redemption Date, provided that in the event the Redemption Date coincides with an Interest Payment Date this drawing does not include any accrued interest on such Bonds.

(b) Of the amount stated in paragraph 2 above:

(i) \$ _____ is demanded in respect of the principal amount of the Bonds referred to in subparagraph (a) above; and

(ii) **[\$0.00 is demanded in respect of accrued interest on such date (the Redemption Date coincides with an Interest Payment Date)] [\$_____ is demanded in respect of accrued interest on such Bonds (the Redemption Date is not an Interest Payment Date)].**

4. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

5. The amount of the drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

6. Upon payment of the amount drawn hereunder, the Bank is hereby directed to permanently reduce the Available Amount by \$(insert amount of reduction) and the Available Amount shall thereupon equal \$(insert new Available Amount). The Available Amount has been reduced by an amount equal to the principal of Bonds paid with this drawing and an amount equal to ___ days' interest thereon at the Cap Interest Rate (as defined in the Letter of Credit).

7. Of the amount of the reduction stated in paragraph 6 above:

(i) \$_____ is attributable to the principal amount of Bonds redeemed; and

(ii) \$_____ is attributable to interest on such Bonds (*i.e.*, ___ days' interest thereon at the Cap Interest Rate).

8. The amount of the reduction in the Available Amount has been computed in accordance with the provisions of the Letter of Credit.

9. Following the reduction, the Available Amount shall be at least equal to the aggregate principal amount of the Bonds Outstanding (to the extent such Bonds are not Ineligible Bonds (as defined in the Letter of Credit)), plus 202 days' interest thereon at the Cap Interest Rate.

10. In the case of a redemption pursuant to Section 401(a)(i) of the Supplemental Indenture, the Trustee, prior to giving notice of redemption to the owners of the Bonds, received written evidence from the Bank that the Bank has consented to such redemption.

IN WITNESS WHEREOF, this Certificate has been executed this ____ day of _____, _____.

as Trustee

By _____
[Title of Authorized Officer]

ANNEX E
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

LIQUIDITY DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”) hereby certifies as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.

2. The Beneficiary is entitled to make this drawing under the Letter of Credit in the amount of \$ _____ with respect to the payment of the purchase price of Bonds tendered for purchase in accordance with Section **[404(a)] [404(c)] [404(d)]** of the Supplemental Indenture and to be purchased on [insert applicable date] (the “*Purchase Date*”) which Bonds have not been successfully remarketed as provided in the Indenture or the purchase price of which has not been received by the Trustee by 11:00 A.M., New York time, on said Purchase Date.

3. (a) The amount of the drawing is equal to (i) the principal amount of Bonds to be purchased pursuant to the Indenture on the Purchase Date other than Ineligible Bonds (as defined in the Letter of Credit), *plus* (ii) interest on such Bonds accrued from the immediately preceding Interest Payment Date (as defined in the Indenture) (or if none, the date of issuance of the Bonds) to the Purchase Date, provided that in the event the Purchase Date coincides with an Interest Payment Date this drawing does not include any accrued interest on such Bonds.

(b) Of the amount stated in paragraph 2 above:

(i) \$_____ is demanded in respect of the principal portion of the purchase price of the Bonds referred to in paragraph 2 above; and

(ii) **[\$0.00 is demanded in respect of accrued interest on such date (the Purchase Date coincides with an Interest Payment Date)]** [**\$_____ is demanded in respect of payment of the interest portion of the purchase price of such Bonds (the Purchase Date is not an Interest Payment Date)**].

4. The amount of the drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Upon payment of the amount drawn hereunder, the Bank is hereby directed to reduce the Available Amount of the Letter of Credit by **[\$insert amount of reduction]** and the Available Amount shall, after giving effect to such reduction, equal **[\$insert new Available Amount]**.

6. Of the amount of such reduction stated in paragraph 5 above:

(i) \$_____ is attributable to the principal amount of Bonds tendered; and

(ii) \$_____ is attributable to interest on such Bonds (*i.e.*, 202 days' interest at the Cap Interest Rate (as defined in the Letter of Credit)).

7. The Beneficiary will register or cause to be registered in the name of the Bank (or its nominee at the written direction of the Bank), upon payment of the amount drawn hereunder, Bonds in the principal amount of the Bonds being purchased with the amounts drawn hereunder and will deliver such Bonds in accordance with the Indenture.

8. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this _____ day of _____, _____.

as Trustee

By _____

[Title of Authorized Officer]

ANNEX F
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

ACCELERATION DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.

2. An Event of Default has occurred under subsection [insert subsection] of Section 1101 of the Original Indenture and the Trustee has declared the principal of and accrued interest on all Bonds then outstanding immediately due and payable. The Beneficiary is entitled to make this drawing in the amount of \$_____ under the Letter of Credit pursuant to Section 405(B)(ii)(b) of the Supplemental Indenture in order to pay the principal of and interest accrued on the Bonds due to an acceleration thereof in accordance with Section 1101 of the Original Indenture.

3. (a) The amount of this drawing is equal to (i) the principal amount of Bonds outstanding on [insert date of acceleration] (the “*Acceleration Date*”) other than Ineligible Bonds (as defined in the Letter of Credit), plus (ii) interest on such Bonds accrued from the immediately preceding Interest Payment Date (as defined in the Indenture) to the Acceleration Date.

(b) Of the amount stated in paragraph 2 above:

(i) \$_____ is demanded in respect of the principal portion of the Bonds referred to in subparagraph (a) above; and

(ii) **[\$0.00 is demanded in respect of accrued interest on such date (the Acceleration Date coincides with an Interest Payment Date)]**
[\$_____ is demanded in respect of accrued interest on such Bonds (the Acceleration Date is not an Interest Payment Date)].

4. The amount of this drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this ____ day of _____, 20____.

_____, as Trustee

By _____
[Title of Authorized Officer]

**ANNEX G
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

STATED MATURITY DRAWING CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned individual, a duly authorized officer of U.S. Bank National Association (the “*Beneficiary*”), hereby certifies on behalf of the Beneficiary as follows with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “*Letter of Credit*”), issued by Bank of America, N.A. (the “*Bank*”) in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.
2. The Beneficiary is entitled to make this drawing in the amount of \$_____ under the Letter of Credit pursuant to Section 405(B)(i)(b) of the Supplemental Indenture.
3. (a) The amount of this drawing is equal to the principal of and interest on the Bonds Outstanding on _____, 20__, the maturity date thereof as specified in Section 401(c) of the Supplemental Indenture, other than Ineligible Bonds (as defined in the Letter of Credit).

(b) Of the amount stated in paragraph (2) above:
 - (i) \$_____ is demanded in respect of the principal portion of the Bonds referred to in subparagraph (2) above; and
 - (ii) **[\$0.00 is demanded in respect of accrued interest on such date (the maturity date coincides with an Interest Payment Date)]** [\$_____ is demanded in respect of payment of the interest portion of such Bonds (the maturity date is not an Interest Payment Date)].

4. The amount of this Drawing made by this Certificate was computed in compliance with the terms and conditions of the Indenture and, when added to the amount of any other drawing under the Letter of Credit made simultaneously herewith, does not exceed the Available Amount (as defined in the Letter of Credit).

5. Payment by the Bank pursuant to this drawing shall be made to the Trustee in accordance with the instructions set forth in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been executed this _____ day of _____,
_____.

as Trustee

By _____
[Title of Authorized Officer]

ANNEX H
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

REDUCTION CERTIFICATE

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned hereby certifies with respect to (i) that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the "*Letter of Credit*"), issued by Bank of America, N.A. (the "*Bank*") in favor of the Beneficiary; (ii) those certain Bonds (as defined in the Letter of Credit); and (iii) that certain Indenture (as defined in the Letter of Credit):

1. The Beneficiary is the Trustee under the Indenture.

2. Upon receipt by the Bank of this Certificate, the Available Amount (as defined in the Letter of Credit) shall be reduced by \$_____ and the Available Amount shall thereupon equal \$_____. \$_____ of the new Available Amount is attributable to interest and \$_____ of the new Available Amount is attributable to principal.

3. The amount of the reduction in the Available Amount has been computed in accordance with the provisions of the Letter of Credit.

4. Following the reduction, the Available Amount shall be at least equal to the aggregate principal amount of the Bonds Outstanding (other than Ineligible Bonds (as defined in the Letter of Credit)) plus \$_____ which is at least 202 days' accrued interest on said principal amount of the Bonds at the Cap Interest Rate (as defined in the Letter of Credit) and assuming a year of 365 days.

IN WITNESS WHEREOF, this Certificate has been executed this _____ day of _____, _____.

as Trustee

By _____
[Title of Authorized Officer]

**ANNEX I
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT**

No. _____

TRANSFER CERTIFICATE

[Date]

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Re: Bank of America Irrevocable Transferable Letter of Credit
No. _____ dated June [__], 2019

We, the undersigned "Transferor", hereby irrevocably transfer all of our rights to draw under the above referenced Letter of Credit (as amended, the "*Letter of Credit*") in its entirety to:

NAME OF TRANSFEREE

(Print Name and complete address of the Transferee)

"Transferee"

ADDRESS OF TRANSFEREE

CITY/STATE/COUNTRY ZIP

(the "*Transferee*") all rights of the Transferor with respect to the above-referenced Letter of Credit, including the right to draw under said Letter of Credit in the amount of the full unutilized balance thereof. Said Transferee has succeeded the Transferor as Trustee under that certain Indenture of Trust, dated as of March 1, 1985 (the "*Original Indenture*"), as supplemented by that Sixteenth Supplemental Indenture of Trust dated as of April 1, 2008 (the "*Supplemental Indenture*," and together with the Original Indenture and as amended or supplemented from time to time pursuant to its terms, the "*Indenture*"), between Northern California Power Agency (the "*Issuer*") and U.S. Bank National Association, in its capacity as Trustee and as Tender Agent, with respect to Northern California Power Agency Hydroelectric Project Number One Revenue Bonds 2008 Refunding Series A, issued by the Issuer.

By virtue of this transfer, the Transferee shall have the sole rights as beneficiary of said Letter of Credit, including sole rights relating to any past or future amendments thereof, whether increases or extensions or otherwise. All amendments are to be advised directly to the Transferee without necessity of any consent of or notice to the Transferor.

By its signature below, the Transferee acknowledges that it has duly succeeded the Transferor as Trustee under the Indenture, and agrees to be bound by the terms of the Indenture as if it were the original Trustee thereunder.

The Letter of Credit is returned herewith, and we ask you to endorse the transfer on the reverse thereof and to forward it directly to the Transferee with your customary notice of transfer.

Very truly yours,

[Insert Name of Trustee],
as Trustee

By: _____
[Insert name and title of authorized officer]

SIGNATURE OF THE ABOVE OFFICER,
DULY AUTHORIZED TO ACT ON
BEHALF OF [insert name of
Trustee], AUTHENTICATED BY:

By: _____
Name: _____
Title: _____

Acknowledged by
[insert name of Transferee]
as Transferee and successor Trustee

By: _____
Name: _____
Title: _____

SIGNATURE OF THE ABOVE OFFICER
DULY AUTHORIZED TO ACT ON BEHALF
OF [insert name of Transferee], AUTHENTICATED BY:

By: _____
Name: _____
Title: _____

ANNEX J
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

NOTICE OF EXTENSION

_____, _____

U.S. Bank National Association
as Trustee (the “*Trustee*”)
100 Wall Street, Suite 1600
New York, New York 10005
Attention: Corporate Trust Services

Ladies and Gentlemen:

Reference is hereby made to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [__], 2019 (as amended, the “*Letter of Credit*”), established by us in your favor as Beneficiary. We hereby notify you that, in accordance with the terms of the Letter of Credit, the Stated Expiration Date (as defined in the Letter of Credit) has been extended to _____.

This letter shall be attached to the Letter of Credit and made a part thereof.

BANK OF AMERICA, N.A.

By _____
Name: _____
Title: _____

ANNEX K
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT

No. _____

NOTICE OF REMARKETING

Bank of America, N.A.
1 Fleet Way
PA6-580-02-30
Scranton, Pennsylvania 18507

Attention: Standby Letter of Credit Department

Ladies and Gentlemen:

The undersigned, a duly authorized officer of U.S. Bank National Association (the “Trustee”), hereby notifies Bank of America, N.A. (the “Bank”), with reference to that certain Irrevocable Transferable Letter of Credit No. _____ dated June [___], 2019 (as amended, the “Letter of Credit”; terms defined therein and not otherwise defined herein shall have the meanings set forth in the Letter of Credit) issued by the Bank in favor of the Trustee as follows:

1. _____ is the Remarketing Agent under the Indenture for the holders of the Bonds.

2. The Trustee has paid the amount of \$_____ to the Bank today on behalf of the Issuer, which is a payment made to reimburse the Bank, pursuant to the Reimbursement Agreement, for amounts (or portions thereof) drawn under the Letter of Credit pursuant to a Liquidity Drawing.

3. Of the amount referred to in paragraph 2, \$_____ represents the aggregate principal amount of Purchased Bonds resold or to be resold on behalf of the Issuer.

4. Of the amount referred to in paragraph 2, \$_____ represents accrued and unpaid interest on such Purchased Bonds.

IN WITNESS WHEREOF, the Trustee has executed and delivered this Certificate as of this
_____ day of _____, _____.

[INSERT NAME OF TRUSTEE],
as Trustee

By _____
Name: _____
Title: _____

ANNEX L
TO
BANK OF AMERICA, N.A.
LETTER OF CREDIT
No. _____

NOTICE OF MANDATORY TENDER

[DATE]

U.S. Bank National Association
as Trustee (the “Trustee”)
100 Wall Street, Suite 1600
New York, New York 10005
Attention: Corporate Trust Services

Ladies and Gentlemen:

The undersigned, a duly authorized officer of Bank of America, N.A. (the “Bank”), hereby advises you, with reference to Irrevocable Transferable Letter of Credit No. _____, dated June [___], 2019 (as amended, the “Letter of Credit”; any capitalized term used herein and not defined shall have its respective meaning as set forth in the Letter of Credit) issued by the Bank in your favor, that:

[Insert one of the following paragraphs as appropriate]

[An “Event of Default” has occurred under the Reimbursement Agreement and the Bank has elected to direct the Trustee to cause a mandatory tender of the Bonds pursuant to the Indenture, whereby the Letter of Credit will terminate _____ (6) days following the receipt by the Trustee of this Notice of Mandatory Tender [insert date that is 6 days from beneficiary’s receipt of this notice or, if such day is not a Business Day, the next succeeding Business Day].]

[An “Event of Default” has occurred under the Reimbursement Agreement and, as a result thereof, the amount of the Interest Drawing will not be reinstated and the Bank has elected to direct the Trustee to cause a mandatory tender of the Bonds pursuant to the Indenture, whereby the Letter of Credit will terminate _____ (6) days following the receipt by the Trustee of this Notice of Mandatory Tender [insert date that is 6 days from beneficiary’s receipt of this notice or, if such day is not a Business Day, the next succeeding Business Day].]

BANK OF AMERICA, N.A.

By _____

Name: _____

Title: _____