

12745 N. Thornton Road Lodi, CA 95242

phone (209) 333-6370 fax (209) 333-6374 web www.ncpa.com

Agenda

**Date:** April 8, 2015

### Subject: April 13, 2015 Lodi Energy Center Project Participant Committee Meeting

Location: 12745 N. Thornton Road, Lodi, CA or via teleconference

Time: 10:00 A.M.

\*\*\* In compliance with the Brown Act, you may participate in person at the meeting location or via teleconference at one of the locations listed below. <u>In either case</u>, please: (1) post this notice at a publicly accessible location at the <u>participation</u> location at least 72-hours before the call begins, and (2) have a speaker phone available for any member of the public who may wish to attend at your location.

NCPA	NCPA	CITY OF HEALDSBURG
12745 N. Thornton Road	651 Commerce Drive	401 Grove Street
Lodi, CA	Roseville, CA	Healdsburg, CA
BAY AREA RAPID TRANSIT	CITY OF GRIDLEY	CITY OF LOMPOC
300 Lakeside Drive, 16th Floor	685 Kentucky Street	100 Civic Center Plaza
Oakland, CA	Gridley, CA	Lompoc, CA
CITY OF BIGGS 465 "C" Street Biggs, CA	PLUMAS-SIERRA RURAL ELECTRIC COOP 73233 Highway 70 Portola, CA	CITY OF UKIAH 411 W Clay Street Ukiah, CA
CALIFORNIA DEPARTMENT OF WATER RESOURCES 3310 El Camino Ave. Room 317 Sacramento, CA	CITY OF SANTA CLARA 1500 Warburton Avenue Santa Clara, CA	POWER & WATER RESOURCES POOLING AUTHORITY 2106 Homewood Way, No. 100 Carmichael, CA 95608

The Lodi Energy Center Project Participant Committee may take action on any of the items listed on this Agenda regardless of whether the matter appears on the Consent Calendar or is described as an action item, a report, or an information item. If this Agenda is supplemented by staff reports, they are available to the public upon written request. Pursuant to California Government Code Section 54957.5, the following is the location at which the public can view Agendas and other public writings: NCPA, 651 Commerce Drive, Roseville, CA or www.ncpa.com

Persons requiring accommodations in accordance with the Americans with Disabilities Act in order to attend or participant in this meeting are requested to contact the NCPA Secretary at 916.781.3636 in advance of the meeting to arrange for such accommodations.

### 1. Call Meeting to Order and Roll Call

### PUBLIC FORUM

Any member of the public who desires to address the Lodi Energy Center Project Participant Committee on any item considered by the Lodi Energy Center Project Participant Committee at this meeting, before or during the Committee's consideration of that item, shall so advise the Chair and shall thereupon be given an opportunity to do so. Any member of the public who desires to address the Lodi Energy Center Project Participant Committee on any item within the jurisdiction of the Lodi Energy Center Project Participant Committee and not listed on the Agenda may do so at this time.

- 2. Meeting Minutes Approval of the following PPC meeting minutes:
  - March 9, 2015 regular meeting

### MONTHLY REPORTS

- 3. Operational Report for March 2015 (Jeremy Lawson)
- 4. Market Data Report for March 2015 Verbal Report (Bob Caracristi)
- 5. Update regarding Results of Bid Strategy for CAISO Integrated Forward Market; update re request for modelling of increased Capacity Factor information Staff to discuss the results for March from reducing the Minimum Load Costs component of the LEC DA Market bids and request for modelling of capacity factor information *(Ken Goeke)*
- 6. Monthly Asset Report (Michael DeBortoli)

### CONSENT CALENDAR

All items on the Consent Calendar are considered routine and will be approved without discussion by a single roll call vote. Any Project Participant 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 Participants will be polled to determine if any Participant wishes to abstain from one or more items on the Consent Calendar.

- 7. Treasurer's Report for March Accept by all Participants
- 8. Financial Report for March Approve by all Participants
- 9. GHG Reports (excerpted from monthly ARB) Accept by all Participants
- 10. American Exchanger Services, Inc. Staff seeking approval of a five year Multi-Task General Services Agreement for not to exceed \$300,000 for inspections and maintenance on heat exchangers, condensers, chillers for use at all facilities. All purchase orders issued pursuant to this agreement will be charged against approved Annual Operating budgets.
- 11. Sulzer Turbo Services Houston, Inc. Staff seeking approval of a five year Multi-Task General Services Agreement and Agreement for Purchase of Equipment, Materials and Supplies for not to exceed \$1,500,000 for inspection and maintenance services and spare parts for use at all facilities. All purchase orders issued pursuant to this agreement will be charged against approved Annual Operating budgets.

- 12. OSIsoft LLC Staff seeking approval of a five year Enterprise Program Agreement for not to exceed \$447,500 for licensing, monitoring, and support of OSIsoft PI software for all facilities. All purchase orders issued pursuant to this agreement will be charged against approved Annual Operating budgets.
- 13. LEC PMOA Schedule 1, Exhibit 8 Settlement of CAISO Charge Codes and Allocations to Participants – Staff seeking approval of revised Exhibit 8 to Schedule 1.00 to reflect the addition of a settlement charge code for the disposition of proceeds associated with the CAISO's Generator Interconnection Process.

Consent Items pulled for discussion: \_\_\_\_\_

### **BUSINESS ACTION ITEMS**

- **14. Lodi Energy Center Annual Budget for Fiscal Year 2016** Staff seeking approval of the LEC proposed annual budget for fiscal year 2016 (*Michael DeBortoli*)
- **15.** PG&E's Compressed Air Storage Project Staff to present a high level conceptual plan of the PG&E compressed air storage project including waiver of right of first refusal with the City of Lodi; and seeking direction from the Project Participants to move forward with the project (*Ken Speer*)

### **INFORMATIONAL/ DISCUSSION ITEMS**

- **16. NCPA Annual Conference Rates Charged to LEC Project Participant Non Members** Staff to discuss follow-up to the request for member rate to attend the NCPA annual conference for PPC non-members (*Ken Speer*)
- 17. Proclamation for Michael Werner for Service as LEC PPC Chairman

### 18. Other New Business

### **ADJOURNMENT**

Next Regular Meeting: May 11, 2015

### Lodi Energy Center Project Participant Committee Meeting March 9, 2015 - MEETING MINUTES Location: Lodi Energy Center 12745 N. Thornton Rd, Lodi CA 95242 and by teleconference 10:00 A.M.

### 1. <u>Call Meeting to Order and Roll Call</u>

The PPC meeting was called to order at 10:04 a.m. by Chairman Mike Werner. He asked that roll be called of the Project Participants as listed below.

PPC Meeting Attendance Summary									
Participant	Attendance	Particulars / GES							
Azusa - Morrow	Present	2.7857%							
BART - Lloyd	Present	6.6000%							
Biggs - Sorenson	Present	0.2679%							
CDWR - Werner	Present	33.5000%							
Gridley - Borges	Absent	1.9643%							
Healdsburg - Crowley	Absent	1.6428%							
Lodi - Cadek	Present	9.5000%							
Lompoc - Hostler	Present	2.0357%							
MID - Caballero	Present	10.7143%							
Plumas-Sierra - Brozo	Absent	0.7857%							
PWRPA - Palmerton	Absent	2.6679%							
SVP - Hance	Absent	25.7500%							
Ukiah - Grandi	Absent	1.7857%							
Summary									
Present	7	65.4036%							
Absent	6	34.5964%							
Quorum by #:	Yes								
Quorum by GES:	Yes								
Meeting Date:		3/9/2015							

### Public Forum

Chairman Werner asked if any members of the public were present in Lodi or at any of the other noticed meeting locations who would like to address the PPC on any agenda items. No members of the public were present.

### 2. <u>Meeting Minutes</u>

The draft minutes of the regular meeting held on February 9, 2015 were considered. The LEC PPC considered the following motion:

Date: 3/9/2015 The PPC approves the minutes of the February 9, 2015 regular meeting as Motion: presented.

#### Moved by: Azusa Seconded by: Lodi

Discussion: There was no further discussion.

Vote Summary on Motion						
Participant	Vote	Particulars / GES				
Azusa	Yes	2.7857%				
BART	Yes	6.6000%				
Biggs	Yes	0.2679%				
CDWR	Yes	33.5000%				
Gridley	Absent	1.9643%				
Healdsburg	Absent	1.6428%				
Lodi	Yes	9.5000%				
Lompoc	Yes	2.0357%				
Modesto	Yes	10.7143%				
Plumas-Sierra	Absent	0.7857%				
PWRPA	Absent	2.6679%				
Silicon Valley Power	Absent	25.7500%				
Ukiah	Absent	1.7857%				
Vote Summary						
Total Ayes	7	65.4036%				
Total Noes	0	0.0000%				
Total Abstain	0	0.0000%				
Total Absent	6	34.5964%				
Result:	Motion passed.					

### MONTHLY REPORTS

### 3. **Operational Reports for February 2015**

Mike DeBortoli presented the Operational Report for February and commented it was a very good month. There were no OSHA recordable accidents, no permit violations and no NERC/WECC violations. The written Operational report will be corrected regarding outages. The plant was operational on 27 or 27 available days, but was out of service on February 28 for an inlet steam leak repair.

Mike's report reflected monthly production of 151,620 MWH, 605 service hours, and equivalent operating availability of 100.00%. The report set forth the Capacity Factor @ 280MW Pmax of 80.58% and @ 302MW Pmax of 74.71%. He discussed some issues developing with the steam turbine and the need for an offline water wash which will take three days to complete. He will

provide further updates. The plant cycled a bit during February with five hot starts and zero warm or cold starts.

Mike DeBortoli later discussed an operational issue with respect to the plant start-ups taking longer. He said the steam turbine case is too warm so the cooling time at shut down is taking longer thus also taking longer to bring the plant back up on start up. Staff has various theories about what is occurring including the piston rings allowing blow-by and problems on the HP side. Siemens is going over the data to make a determination. In the meantime a work around is in place to open the value to force cooling but Mike wants to complete work on the piston rings before they completely fail which would result in no cooling and a forced outage. Martin Caballero asked if the bids need to be changed regarding startup time. Mike said that is not necessary since this interim solution has been built into the programmed logic. The work contemplated may take as long as three weeks to perform so the issue needs to be measured against the planned outage set for May 1-9. The hot gas path service will be done in 2016. Mike is awaiting definitive word from Siemens that the problem and solution have been identified before decisions are made.

### 4. <u>Market Data Report for February 2015</u>

Bob Caracristi discussed the operating and financial settlement results for the month which dovetailed with the operational report. He noted the same issue occurred in February as January regarding the CAISO RA availability standard and that NCPA will again submit a request for correction.

### 5. <u>Update Regarding Results of Change in Strategies for CAISO Integrated Forward</u> <u>Market</u>

Ken Goeke provided an update to the Committee for February with the results from the current bidding strategy. The results continue to be favorable as demonstrated by the detailed modelled data results. Staff will continue to monitor run-off, load levels, and congestion which may affect these outcomes. Staff will continue to run the model even when the bid strategy returns to cycling the plant.

### 6. <u>Monthly Asset Report</u>

Mike DeBortoli presented the monthly asset report/budget review for January. He noted again the deviation in administration costs because of timing for monthly lease payments but overall the cost balances out. He said other costs are tracking well. The forecasts have not yet been updated.

### Consent Calendar

The consent calendar was considered. Chairman Werner asked if any Participant wished to remove any item listed on the Consent Calendar for separate discussion. He then asked if any Participant wished to abstain from one or more items on the Consent Calendar. There were no abstentions. The LEC PPC considered the following motion:

### **Date:** 3/9/2015

Motion: The PPC approves the Consent Calendar consisting of: agenda items no. 7 Treasurer's Report for February 2015; 8. Financial Report for February 2015; 9. GHG Reports for March 2015; 10. Five year Brenntag Pacific Inc. Multi-Task Agreement for the Purchase of Equipment, Materials and Supplies in amount of \$1,500,000 for chemical purchases and issuance of purchases orders in any amount as needed pursuant to the contract; 11. Five year Sierra Chemical Company Multi-Task Agreement for the Purchase of Equipment, Materials and Supplies in an amount not to exceed \$1,500,000 for chemical purchases and issuance of purchase orders in any amount as needed pursuant to the contract; and 12. Five year Peterson Industrial Scaffolding, Inc. Multi-Task General Services Agreement in an amount not to exceed \$350,000 for scaffolding services.

# Moved by: MID Seconded by: BART

Discussion: There was no further discussion.

Vote Summary on Motion						
Participant	Vote	Particulars / GES				
Azusa	Yes	2.7857%				
BART	Yes	6.6000%				
Biggs	Yes	0.2679%				
CDWR	Yes	33.5000%				
Gridley	Absent	1.9643%				
Healdsburg	Absent	1.6428%				
Lodi	Yes	9.5000%				
Lompoc	Yes	2.0357%				
Modesto	Yes	10.7143%				
Plumas-Sierra	Yes	0.7857%				
PWRPA	Absent	2.6679%				
Silicon Valley						
Power	Absent	25.7500%				
Ukiah	Absent	1.7857%				
	l					
Vote Summary						
Total Ayes	8	66.1893%				
Total Noes	0	0.0000%				
Total Abstain	0	0.0000%				
Total Absent	5	33.8107%				
Result:	Motion passed					

### **BUSINESS ACTION ITEMS**

### 13. <u>PPC Chairperson Position</u>

Mike Werner has served as the Chairman of the LEC Project Participant Committee since September 9, 2011. After providing excellent leadership for the past 3-1/2 years, he requested that the baton be passed to a new Chairperson. The Participants unanimously agreed that Mike has done an excellent job as Chairman and requested that a proclamation or resolution be prepared to memorialize that great work. After discussion, Mike moved that George Morrow, currently Vice Chair of the Committee, serve as the new Chairman. The LEC PPC considered the following motion:

Date:	3/9/2015
Motion:	The PPC approves election of George Morrow to serve as the new
	Chairperson of the LEC Project Participant Committee to conduct the
	business of the PPC pursuant to the Power Sales Agreement and the Project
	Management and Operations Agreement.

Moved by:	CDWR	
Seconded by:	Lodi	

Discussion: There was no further discussion.

Vote Summary on Motion							
Participant	Vote	Particulars / GES					
Azusa	Abstain	2.7857%					
BART	Yes	6.6000%					
Biggs	Yes	0.2679%					
CDWR	Yes	33.5000%					
Gridley	Absent	1.9643%					
Healdsburg	Absent	1.6428%					
Lodi	Yes	9.5000%					
Lompoc	Yes	2.0357%					
Modesto	Yes	10.7143%					
Plumas-Sierra	Yes	0.7857%					
PWRPA	Absent	2.6679%					
Silicon Valley							
Power	Absent	25.7500%					
Ukiah	Absent	1.7857%					
Vote Summary							
Total Ayes	7	63.4036%					
Total Noes	0	0.0000%					
Total Abstain	1	2.7857%					
Total Absent	5	33.8107%					
Results:	Motion passed.						

In light of George Morrow's election as Chairman, a vacancy now exists for the Vice Chair position. George suggested that Martin Caballero of MID assume the role of Vice Chairman. The LEC PPC considered the following motion:

**Date:** 3/9/2015

**Motion:** The PPC approves election of Martin Caballero to serve as the new Vice Chairperson of the LEC Project Participant Committee to conduct the business of the PPC pursuant to the Power Sales Agreement and the Project Management and Operations Agreement.

Moved by:	Azusa
Seconded by:	CDWR

Discussion: There was no further discussion.

Vote Summary on Motion							
Participant	Vote	Particulars / GES					
Azusa	Yes	2.7857%					
BART	Yes	6.6000%					
Biggs	Yes	0.2679%					
CDWR	Yes	33.5000%					
Gridley	Absent	1.9643%					
Healdsburg	Absent	1.6428%					
Lodi	Yes	9.5000%					
Lompoc	Yes	2.0357%					
Modesto	Yes	10.7143%					
Plumas-Sierra	Yes	0.7857%					
PWRPA	Absent	2.6679%					
Silicon Valley							
Power	Absent	25.7500%					
Ukiah	Absent	1.7857%					
Vote Summary							
Total Ayes	8	66.1893%					
Total Noes	0	0.0000%					
Total Abstain	0	0.0000%					
Total Absent	5	33.8107%					
Results:	Motion passed.						

### INFORMATIONAL ITEMS

### 14. FY 2015/16 Draft Budget

Mike DeBortoli presented an updated PowerPoint summary slide indicating the revised budget numbers since the last draft presented in February and reasons for the changes. These revised numbers include overhead and allocations available at this point in time. The result shows a 19% decrease in the net cost to Participants from the current year budget mainly attributable to the decrease in the cost of the CAISO upgrade project for the year.

Ken Speer requested that any specific questions which come up regarding the budget between now and the next PPC meeting when final budget approval will be sought be directed to Mike DeBortoli. Martin Caballero asked a question about whether adjustments have been made to reflect the increased capacity factor as reflected in the recent model generated by Jan Bonatto. The response was that the Plexos model is different and thinks not, but subsequent discussion included questions about what capacity factor is used for the budget. Mike Brozo said tracking minimum load scenarios could give guidance on GHG needed for the project. Ken Goeke said he could try to do that after the fact for 2014 but noted it is difficult due to the congestion cost. Ken Speer said the biggest impact on this budget will be the lack of snow pack so there will be no run off. Staff will look at the drought situation and minimum loads and development of a model to reflect how much the capacity factor may change.

George Morrow presented a request that the LEC Project Participants be charged the same rate as the NCPA members to attend the NCPA Annual Conference. Ken Speer will take the lead as interface with NCPA management and will report back to the Committee.

### 15. <u>Capacity Procurement Mechanism Replacement</u>

As a follow up to the comment from Martin Caballero at the February meeting about news coming out of the CAISO about new backstop capacity procurement rules, Tony Zimmer presented oral information to supplement the CAISO Memorandum dated February 4 included in the meeting materials. The CAISO memorandum re: Decision on capacity procurement mechanism replacement framework requests that the Board approve the changes such that the new competitive solicitation process framework will provide a platform to more efficiently procure and price backstop capacity and such that prices are based on current market conditions. The current mechanism uses fixed rate to compensate capacity. Tony said LEC historically has not been a CPM Resource. Discussion was had about whether LEC would want to elect to bid as a CPM resource, which would have an impact on operations. If the Participants are interested in this option, discussion is needed to work out a procedure and put the needed process and/or default mechanisms in place.

### 16. Other New Business

### **Adjournment**

The next regular meeting of the PPC is scheduled for Monday, April 13, 2015. The meeting was adjourned at 11:34 a.m.



12745 N. Thornton Road Lodi, CA 95242

phone (209) 333-6370 fax (209) 333-6374 web www.ncpa.com

Agenda Item No.: 3

### Lodi Energy Center Project Participant Committee

# **Operational Report**

Date: 4/13/2015

To: Lodi Energy Center Project Participant Committee

### <u>Safety</u>

• OSHA Recordable: 0 Accidents

### Notice of Violations

- Permits: 2 Violations. LEC is challenging two potential violations due to late reporting. One was reported 24 minutes late due to the Operator handling other plant upsets at that time. This has been challenged. The second included an operator failing to report during the night, it was caught in the morning. Both were the result of a breakdown in the CEMS. One resulted in excess emissions which were granted relief as a result of the breakdown. The other, no excess emissions resulted due to the CEMS breakdown.
- NERC/WECC: 0 Violations

### **Outage Summaries:**

March 1<sup>st</sup> – Vibration Probe Wiring damage from HP Inlet Steam Leak. During start-up, the high pressure steam turbine vibration instrument wiring was found to be non-operational. The steam turbine was out of service for 3.8 hours due to this issue. Despite the vibration instrumentation work on Saturday 2/28, there were still failures that were undetectable. Staff exchanged the faulty wiring with one from the other end and returned the unit back into service.

### Planned Outage Summaries:

• 2015, May 1<sup>st</sup> – May 9<sup>th</sup>: Balance of Plant, Outage Work

enerating Unit Statist	ics:			LEC	<u>Report</u> <u>Date:</u> Start Date	3/1/2015
1. Monthly Producti	on	184,487	MWH		End Date	4/1/2015
2. Productivity Facto		104,407			End Date	-1/2013
a. Service Hours	Л	717	Hours			
b. Service Factor		96.53	%			
	or @ 280MW Pmax	88.68	%			
	or @ 302MW Pmax	82.22	%			
	ting Availability (EOA)	99.82	%			
4. Forced Outage Ra	• • • •	55.62	,,,			
0	urbine Generator	0.00	%			
b. Steam Turbine		0.53	%			
5. Heat Rate Deviati						
	Current Market Price)	4.00	\$/mmBTU			
MW Range	•	Average HR	PMOA HR	Deviation	Production	Cost
		BTU/kW-Hr	BTU/kW-Hr	%	MWH	\$
Seg. 1	296 - 302	6,850	6850	0.00%	0	\$0
Seg. 2	284 - 296	6,941	6870	1.03%	57,094	\$16,212
Seg. 3	275 - 284	6,957	6971	-0.20%	37,525	-\$2,143
Seg. 4	250 - 275	6,987	7081	-1.33%	51,139	-\$19,272
Seg. 5	225 - 250	7,052	7130	-1.09%	14,445	-\$4,489
Seg. 6	200 - 225	7,154	7315	-2.20%	9,963	-\$6,408
			7711	F 0F0/		-\$13,936
Seg. 7	1/5 - 225	/.321	//11	-5.05%	8.944	-213.930
Seg. 7 Seg. 8	175 - 225 165 - 175	7,321 7,645	7856	-2.69%	8,944 4,333 <b>183,442</b>	-\$13,936 -\$3,658 <b>-\$33,694</b>
-	165 - 175				4,333	-\$3,658
6. AGC Control Devi	165 - 175	7,645	7856	-2.69% Absolute	4,333 183,442 Cost	-\$3,658
Seg. 8 6. AGC Control Devi	165 - 175	7,645 High Dev	7856 Low Dev	-2.69% Absolute Dev	4,333 <b>183,442</b>	-\$3,658
6. AGC Control Devia MW Range Seg. 1	165 - 175 ation	7,645 High Dev MWH	7856 Low Dev MWH	-2.69% Absolute Dev MWH	4,333 183,442 Cost \$	-\$3,658
6. AGC Control Devi	165 - 175 ation 296 - 302	7,645 High Dev MWH 0	7856 Low Dev MWH 0	-2.69% Absolute Dev MWH 0	4,333 183,442 Cost \$ \$0	-\$3,658
Seg. 8 6. AGC Control Devia MW Range Seg. 1 Seg. 2	165 - 175 ation 296 - 302 284 - 296	7,645 High Dev MWH 0 140	7856 Low Dev MWH 0 -142	-2.69% Absolute Dev MWH 0 282	4,333 183,442 Cost \$ \$0 \$7,831	-\$3,658
Seg. 8 6. AGC Control Devia MW Range Seg. 1 Seg. 2 Seg. 3	165 - 175 ation 296 - 302 284 - 296 275 - 284	7,645 High Dev MWH 0 140 64	7856 Low Dev MWH 0 -142 -256	-2.69% Absolute Dev MWH 0 282 320	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896	-\$3,658
6. AGC Control Devia MW Range Seg. 1 Seg. 2 Seg. 3 Seg. 4	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275	7,645 High Dev MWH 0 140 64 230	7856 Low Dev MWH 0 -142 -256 -58	-2.69% Absolute Dev MWH 0 282 320 288	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056	-\$3,658
6. AGC Control Devia MW Range Seg. 1 Seg. 2 Seg. 3 Seg. 4 Seg. 5	165 - 175 ation 296 - 302 284 - 296 275 - 284 250 - 275 225 - 250	7,645 High Dev MWH 0 140 64 230 78	7856 Low Dev MWH 0 -142 -256 -58 -58 -41	-2.69% Absolute Dev MWH 0 282 320 288 119	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354	-\$3,658
Seg. 8 6. AGC Control Devia MW Range Seg. 1 Seg. 2 Seg. 3 Seg. 4 Seg. 5 Seg. 6	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225	7,645 High Dev MWH 0 140 64 230 78 57	7856 Low Dev MWH 0 -142 -256 -58 -41 -35	-2.69% Absolute Dev MWH 0 282 320 288 119 92	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639	-\$3,658
Seg. 8 6. AGC Control Devia MW Range Seg. 1 Seg. 2 Seg. 3 Seg. 4 Seg. 5 Seg. 6 Seg. 7	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225         175 - 225	7,645           High Dev           MWH           0           140           64           230           78           57           44	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639 \$2,213	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting Reliability	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225         175 - 225         165 - 175	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b>	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting ReliabilityStart Type	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225         175 - 225         165 - 175	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571 Hot Starts	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201 Warm Starts	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b> Cold Starts	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting ReliabilityStart TypeNumber of Start	165 - 175 ation 296 - 302 284 - 296 275 - 284 250 - 275 225 - 250 200 - 225 175 - 225 165 - 175	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571 Hot Starts 3	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201 Warm Starts 0	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b> Cold Starts 0	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting ReliabilityStart TypeNumber of StartStart Time Bench	165 - 175 ation 296 - 302 284 - 296 275 - 284 250 - 275 225 - 250 200 - 225 175 - 225 165 - 175	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571 Hot Starts 3 85	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201 Warm Starts 0 160	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b> Cold Starts 0 235	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting ReliabilityStart TypeNumber of StartStart Time BenchStart Time Actual	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225         175 - 225         165 - 175	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571 Hot Starts 3 85 196.0	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201 Warm Starts 0 160 160.0	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b> Cold Starts 0 235 235.0	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting ReliabilityStart TypeNumber of Start:Start Time BenchStart Time ActuaStart Time Devia	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225         175 - 225         165 - 175         /         s         nmark (Minutes)         I (Average Minute)         tion (%)	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571 Hot Starts 3 85 196.0 130.6%	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201 Warm Starts 0 160 160.0 0.0%	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b> Cold Starts 0 235 235.0 0.0%	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting ReliabilityStart TypeNumber of Start:Start Time BenchStart Time ActuaStart Time DeviaStart Fuel Bench	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225         175 - 225         165 - 175         y         s         nmark (Minutes)         I (Average Minute)         tion (%)         mark PMOA (mmBTU)	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571 Hot Starts 3 85 196.0 130.6% 1,967	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201 Warm Starts 0 160 160.0 0.0% 5,200	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b> Cold Starts 0 235 235.0 0.0% 5,430	-\$3,658
Seg. 86. AGC Control DeviaMW RangeSeg. 1Seg. 2Seg. 3Seg. 4Seg. 5Seg. 6Seg. 7Seg. 87. Starting ReliabilityStart TypeNumber of Start:Start Time BenchStart Time ActuaStart Time DeviaStart Fuel Bench	165 - 175         ation         296 - 302         284 - 296         275 - 284         250 - 275         225 - 250         200 - 225         175 - 225         165 - 175         /         s         nmark (Minutes)         I (Average Minute)         tion (%)	7,645           High Dev           MWH           0           140           64           230           78           57           44           17	7856 Low Dev MWH 0 -142 -256 -58 -41 -35 -32 -7 -571 Hot Starts 3 85 196.0 130.6%	-2.69% Absolute Dev MWH 0 282 320 288 119 92 76 24 1,201 Warm Starts 0 160 160.0 0.0%	4,333 <b>183,442</b> Cost \$ \$0 \$7,831 \$8,896 \$8,056 \$3,354 \$2,639 \$2,213 \$747 <b>\$33,735</b> Cold Starts 0 235 235.0 0.0%	-\$3,658

### **Definitions:**

- 1. Monthly Production = Plant Net MWH's
- 2. Capacity Factor
  - a. Service Hours = In Production or in Service State
  - b. Service Factor = SH / PH x 100%
  - c. Capacity Factor = Production / 302MW x PH
  - d. Capacity Factor = Production / 280MW x PH
- 3. Monthly Equivalent Availibility Factor (EAF) = (AH EPDH EFDH) / PH x 100%
- 4. Forced Outage Rate = (FOH/(FOH+SH) \* 100%
- 5. Heat Rate Deviation (HRD)
  - a. Fuel Cost = Cost of Fuel in \$/mmBTU
  - b. Average Heat Rate = The Average Heat Rate for the given Range
  - c. Heat Rate Deviation = (Heat Rate Average Heat Rate Expected) / Heat Rate Expected x 100%
  - d. Production = The Sum of Production for the given Range
  - e. Costs of Heat Rate Deviations = (Average Heat Rate Expected Heat Rate) x Production x Cost of Fuel
- 6. AGC Deviation
  - a. MWH's = AGC Set Point Generation LEC Actual Generation
  - b. Cost of Deviations = Fuel Cost x Heat Rate x Generation
- 7. Starting Reliability
  - a. Number of Starts = Start Count for Hot, Warm, and Cold
  - b. Start Time = Average Time from 0 Fuel Flow to Pmin
  - c. Start Fuel = Average Fuel Consumption to Pmin
  - d. Cost of Fuel Deviation = (Actual Fuel Consumed Expected Fuel) x Cost of Fuel



# February Asset Report

		Most Recent		Above / (below)	Percent Difference	
	Actual	Forecast	Budget	Forecast	Above / (below)	
Revenue	5,018,056	6,254,937	4,060,847	(1,236,881)	-20%	
VOM	5,221,369	5,945,681	3,383,445**	(724,313)	-12%	Timing LTA
Fixed	887,770	854,491	838,796	33,279	4%	Investigating Water Charges
Projects	171,011	241,559	565,939	(70,548)	-29%	
A&G	154,636	187,422	180,508	(32,786)	-17%	
Debt	130,807	149,294	2,203,131	(18,487)	-12%	
Net Cost	1,547,537	1,123,511	3,110,972	424,027	38%	
	Budget					
Net Annual Cost		(\$38,515,566)	(\$40,074,659)	\$1,559,093		
		1	Below budget by	y 3.89%		
**Budget Nun	nber does not in	clude Greenhous	se Gas			

### Lodi Energy Center Monthly Budget Analysis

### Means Actual or Means Actual or Means Actual or Means Actual or Estimated values Means Forecast Means Forecast Means Forecast Means Forecasted values

	July	August	September	October	November	December	January	February	February (Estimate)	February (Diff)	February Estimate vs Actual (Diff %)	March	April	Мау	June	Year End Projection	FY2015 Budget	Percent Used Comments
VOM	5,013,750	3,005,870	7,220,696	8,204,731	2,285,209	4,085,871	6,323,574	5,221,369	5,945,681	724,313	12%	7,376,698	3,972,984	1,867,255	2,452,144	57,647,148	51,681,547	111.5%
Capacity Factor	57%	33%	89%	87%	26%	51%	94%	81%	94%	14%	15%	91%	57%	32%	41%	61%	52%	
Fuel Consumed (mmBTU, estimated)	841,281	498,061	1,261,077	1,261,077	377,086	765,116	1,375,224	1,078,629	1,217,656	139,027	11%	1,296,280	792,312	444,466	579,741	10,570,350	9,123,040	115.9%
Avg Fuel Cost (\$/mmBTU)	5.23	5.05	4.96	4.97	5.13	4.45	3.54	3.25	3.98	0.73	18%	4.04	4.09	3.39	3.44	4.30	4.51	
Power Produced (MWHr, estimated)	118,475	69,005	178,828	178,828	51,635	106,336	196,020	151,608	177,760	26,152	15%	189238	115666	63952	83416	1,503,007	1,274,807	117.9%
Avg Power Price (\$/MWHr)	51.48	48.21	45.28	45.28	49.51	43.40	35.04	33.10	35.19	2.09	6%	35.69	38.25	32.00	33.00	40.85	43.88	
Operations / Variable / LTSA	33,177	143,351	75,472	1,053,321	85,959	130,448	426,789	906,682	173,138	-733,544	-424%	1,150,677	112,659	62,289	554,708	4,735,532	3,651,332	129.7% Timing of LTA Payment
Fuel (estimated)	4,398,896	2,515,899	6,260,014	6,266,698	1,932,834	3,406,639	4,863,748	3,507,973	4,842,989	1,335,017	28%	5,239,077	3,241,241	1,506,741	1,994,310	45,134,070	41,167,130	109.6%
AB32 GHG Offset (estimated)	532,550	314,769	809,067	809,067	244,760	504,456	950,428	740,441	888,800	148,359	17%	946,190	578,330	319,760	417,080	7,166,898	6,374,035	112.4%
CA ISO Charges (estimated)	49,127	31,851	76,143	75,645	21,656	44,328	82,609	66,273	40,754	-25,519	-63%	40,754	40,754	40,754	40,754	610,649	489,050	124.9%
Routine O&M (Fixed)	552,933	791,135	793,683	677,404	878,278	1,488,858	613,030	887,770	822,855	-64,915	-8%	822,855	764,908	764,908	762,908	8,765,551	8,935,879	98.1%
Maintenance / Fixed	31,638	191,168	148,448	225,573	224,966	285,636	160,174	132,436	187,947	55,511	30%	187,947	130,000	130,000	128,000	1,975,986	1,765,358	111.9%
Administration	106,163	96,717	188,734	18,250	7,496	188,236	20,584	272,197	104,068	-168,129	-162%	104,068	104,068	104,068	104,068	1,314,649	1,250,914	105.1% Under Investigation
Mandatory Costs	27,186	10,162	7,623	1,763	13,784	2,227	3,548	7,138	26,209	19,071	73%	26,209	26,209	26,209	26,209	178,267	220,000	81.0%
Inventory Stock	0	91,974	43,909	28,659	5,803	0	11,687	67,541	68,000	459	1%	36,364	36,364	36,364	36,364	395,029	400,000	98.8%
Labor	286,415	284,596	288,276	304,166	522,865	121,672	313,673	314,790	364,797	50,007	14%	364,797	364,797	364,797	364,797	4,095,641	4,299,182	95.3%
Insurance	0	0	13,885	0	0	792,094	0	0	0	0	#DIV/0!	0	0	0	0	805,979	1,000,425	80.6%
Power Management & Settlements	98,993	98,993	98,993	98,993	98,993	98,993	98,993	98,993	98,993	0	0%	98,993	98,993	98,993	98,993	1,187,916	1,187,916	100.0%
Other Costs	2,538	17,525	3,815	0	4,371	0	4,371	-5,325	4,477	9,802	219%	4,477	4,477	4,477	4,477	45,203	51,781	87.3%
Projects	150,000	155,088	150,000	150,000	152,168	159,770	150,000	171,011	241,559	70,548	29%	241,559	241,559	703,998	4,203,998	6,629,151	6,791,260	97.6%
Maintenance Reserve	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	0	0%	150,000	150,000	150,000	150,000	1,800,000	1,800,000	100.0%
Operations & Maintenance Projects	0	0	0	0	0	8,512	0	0	53,998	53,998	100%	53,998	53,998	53,998	53,998	224,504	332,500	67.5%
Capital Projects	0	5,088	0	0	2,168	1,258	0	21,011	37,561	16,550	0	37,561	37,561	500,000	4,000,000	4,604,647	4,658,760	98.8%
A&G	104,462	121,410	131,651	132,694	127,777	113,545	260,575	154,636	187,422	32,786	17%	187,422	187,422	187,422	187,422	1,896,438	2,166,107	87.6%
Administrative & General (Allocated)	86,419	101,714	108,222	111,235	108,310	93,570	228,298	130,807	149,294	18,487	12%	149,294	149,294	149,294	149,294	1,565,751	1,728,654	90.6%
Generation Services Shared	18,043	19,696	23,429	21,459	19,467	19,975	32,277	23,829	38,128	14,299	38%	38,128	38,128	38,128	38,128	330,687	437,453	75.6%
Total O&M Cost	5,821,145	4,073,503	8,296,030	9,164,829	3,443,432	5,848,044	7,347,179	6,434,786	7,197,517	762,732	11%	8,628,534	5,166,873	3,523,583	7,606,472	74,938,288	69,574,793	107.7%
Debt Service	2,203,158	2,203,158	2,203,158	2,203,158	2,203,158	2,203,158	2,203,158	2,203,158	2,203,158	0	0%	2,203,158	2,203,158	2,203,158	2,203,157	24,234,737	26,437,890	91.7%
Revenues	6,099,407	3,326,855	8,097,556	8,097,927	2,556,565	4,615,131	6,868,600	5,018,056	6,254,937	1,236,881	20%	6,754,195	4,423,977	2,046,464	2,752,728	60,657,460	55,938,024	108.4%
ISO Energy Sales (estimated)	6,098,942	3,326,733	8,097,456	8,097,927	2,556,565	4,615,068	6,868,600	5,018,056	6,254,937	1,236,881	20%	6,754,195	4,423,977	2,046,464	2,752,728	60,656,710	55,938,024	
Other Income	465	122	100	0	0	63	0	0	0	0	0%	0	0	0	0	750	-	
Net	(\$1,924,896)	(\$2,949,806)	(\$2,401,632)	(\$3,270,060)	(\$3,090,025)	(\$3,436,071)	(\$2,681,737)	(\$3,619,888)	(\$3,145,739)	\$474,150	-15%	(\$4,077,497)	(\$2,946,055)	(\$3,680,277)	(\$7,056,901)	(\$38,515,566)	(\$40,074,659)	Below budget by 3.89%



651 Commerce Drive Roseville, CA 95678

phone fax web

(916) 781-3636 (916) 783-7693 www.ncpa.com

# LEC Treasurer's Report

AGENDA ITEM NO.:

April 6, 2015 Date:

LEC Project Participant Committee To:

Treasurer's Report for the Month Ended March 31, 2015 Subject:

In compliance with NCPA 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 \$0.

The cash balance held at U.S. Bank includes outstanding checks that have not yet cleared.

Investments - The carrying value of the LEC's investment portfolio totaled \$35,967,107 at month end. The current market value of the portfolio totaled \$36,881.538.

The overall portfolio had a combined weighted average interest rate of 0.418% with a bond equivalent yield (yield to maturity) of 0.434%. Investments with a maturity greater than one year totaled \$17,340,000. During the month \$2 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 increased 1 basis point (from 0.02% to 0.03%) and rates on one year T-Bills increased 4 basis points (from 0.22% to 0.26%).

To the best of my knowledge and belief, all securities held by LEC as of March 31, 2015 are in compliance with the Agency's investment policy. There are adequate cash flow and investment maturities to meet next month's cash requirements.

### **Environmental Analysis**

The Treasurer's report will 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,

MAR C

DONNA STEVENER Assistant General Manager/CFO Administrative Services/Finance

Attachments

Prepared by:

SONDRA AINSWORTH **Treasurer-Controller** 

# LODI ENERGY CENTER

### TREASURER'S REPORT

# MARCH 31, 2015

### **TABLE OF CONTENTS**

### CASH & INVESTMENTS BALANCE

CASH ACTIVITY SUMMARY

INVESTMENT ACTIVITY SUMMARY

INTEREST RATE/YIELD ANALYSIS

INVESTMENT MATURITIES ANALYSIS

DETAIL REPORT OF INVESTMENTS

APPENDIX

PAGE

1 .

2

3

4

5

# Northern California Power Agency/Lodi Energy Center Treasurer's Report Cash & Investment Balance March 31, 2015

\_\_\_\_\_

				1		INVESTMENTS
	CASH	IN	WESTMENTS	TOTAL	PERCENT	at MARKET
MANDATORY FUNDS						
Debt Service Account	•		13,408,283	13,408,283	36.36%	13,408,313
Debt Service Reserve			11,802,222	11,802,222	32.00%	11,794,656
O & M Reserve			10,685,688	10,685,688	28.98%	10,696,454
			35,896,193	35,896,193	97.34%	35,899,423
ADDITIONAL PROJECT FUNDS	*					
GHG Cash Account		-	70,913	70,913	0.19%	70,913
Transmission Upgrade Escrow	911,2	02		911,202	2.47%	911,202
Participant Deposit Account			1	1	0.00%	-
* *	\$ 911,2	02 \$	35,967,107 \$	36,878,309	100.00% \$	36,881,538

NOTE A -Investment amounts shown at book carrying value.

- 1 -

### Northern California Power Agency/Lodi Energy Center Treasurer's Report Cash Activity Summary March 31, 2015

	RECEIPTS								EXE	PENDITURES	<b>3</b>		CASH
	OPS/C	CONSTR		TEREST OTE B)		VESTMENTS (NOTE A)		OPS/CONSTR		VESTMENTS (NOTE B)	INTER-COMPANY FUND TRANSFER		INCREASE / (DECREASE)
MANDATORY FUNDS		· · · · ·						0 <u></u>					·····
Debt Service Account	\$		\$	88	\$	-	\$	; -	\$	(2,211,584)	\$ 2,211,49	6	\$-
Debt Service Reserve		-		18,296		-		-		(18,296)	-		-
O & M Reserve		-	-	18,282		(18,282)		-		-	+		-
		-		36,666		(18,282)				(2,229,880)	2,211,49	6	
ADDITIONAL PROJECT FUNDS GHG Cash Account		-		•		-		-		-	-		-
Transmission Upgrade Escrow <sup>1</sup>				15									15
Participant Deposit Account		-		-		-		-		-	-		-
TOTAL	\$		\$	36,666	\$	(18,282)	\$	-	\$	(2,229,880)	\$ 2,211,49	6	- \$ 15

NOTE A -Investment amounts shown at book carrying value.

NOTE B -Net of accrued interest purchased on investments.

# Northern California Power Agency/Lodi Energy Center Treasurer's Report Investment Activity Summary March 31, 2015

			(NON-CASH)	(NON-CASH)	INVESTM	IENTS
		SOLD OR	DISC/(PREM)	GAIN/(LOSS)		INCREASE /
	PURCHASED	MATURED	AMORT	ON SALE	TRANSFERS	(DECREASE)
MANDATORY FUNDS						
<b>Debt Service Account</b>	2,211,584	-	347	-	-	2,211,931
<b>Debt Service Reserve</b>	18,296	-	(159)	-		18,137
O & M Reserve	-	18,282	221	-		18,503
	2,229,880	18,282	409	-		2,248,571
ADDITIONAL PROJECT F	UNDS					
GHG Cash Account		-	-	-		-
Participant Deposit Acct.		-	-	-	-	-
TOTAL	\$ 2,229,880	\$ 18,282	\$ 409	\$ -	\$ -	\$ 2,248,571

Less Non- Cash Activity

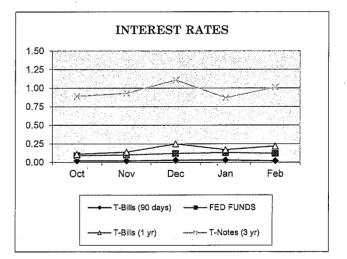
Disc/(Prem) Amortization & Gain/(Loss) on Sale Net Change in Investment --Before Non-Cash Activity (409) \$ 2,248,161

NOTE A -Investment amounts shown at book carrying value.

# NORTHERN CALIFORNIA POWER AGENCY LODI ENERGY CENTER INTEREST RATE/YIELD ANALYSIS March 31, 2015

	WEIGHTED	,
	AVERAGE	BOND
· ·	INTEREST	EQUIVALENT
	RATE	YIELD
OVERALL COMBINED	0.418%	0.434%
Debt Service Account	0.047%	0.048%
Debt Service Reserve	0.544%	0.569%
O & M Reserve	0.747%	0.772%
GHG Cash Account	0.254%	0.254%

	PRIOR
URRENT	YEAR
0.12%	0.09%
0.03%	0.03%
0.06%	0.03%
0.26%	0.11%
0.27%	· 0.14%
0.94%	0.61%
	0.12% 0.03% 0.06% 0.26% 0.27%



### Northern California Power Agency Total Portfolio Investment Maturities Analysis March 31, 2015

Туре	0-7 Days	8-90 Days	91-180 Days	181-270 Days	271-360 Days	1-5 Years	5-10 Years	Total	Percent
US Government Agencies	\$0	\$13,407	\$0	\$0	\$0	\$17,340	\$0	\$30,747	85.49%
US Bank Trust Money Market	3,450			•				3,450	9.59%
Commercial Paper	0							0	0.00%
Investment Trusts (LAIF)	1,770							1,770	4.92%
U.S.Treasury Market Acct. *	0					·		0	0.00%
U.S.Treasury Bill								0	0.00%
Certificates of Deposit	0							0	0.00%
Total Dollars	\$5,220	\$13,407	\$0	\$0	\$0	\$17,340	\$0	\$35,967	100.00%
Total Percents	14.51%	37.28%	0.00%	0.00%	0.00%	48.21%	0.00%	100.00%	

Investment 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. \*

\*\*

- 5 -

### NORTHERN CALIFORNIA POWER AGENCY

# **Detail Report Of Investments**

### APPENDIX

Note:

This appendix has been prepared to comply with

Government Code section 53646.



### Northern California Power Agency Treasurer's Report

03/31/2015

### LEC Issue#1 2010A DS Fund

	boruna		Interest	Purchase	Purchased	Maturity	Days to	Bond*				
Issuer	Trustee / Custodian	Stated Value	Rate	Date	Price	Date	Maturity	Equiv Yield	Market Value	CUSIP	Investment #	Carrying Value
US Bank Trust	USB	707	0.100	07/01/2013	707		1	0.100	707	SYS79003	79003	707
Federal Home Loan Ba	USBT	693,000	0.050	02/27/2015	692,915	05/26/2015	55	0.050	692,958	313384GB9	26201	692,947
Federal Home Loan Ba	USBT .	694,000	0.090	11/26/2014	693,684	05/27/2015	56	0.091	693,951	313384GC7	26181	693,903
Federal Home Loan Ba	USBT	2,433,000	0.035	03/27/2015	2,432,851	05/29/2015	58	0.035	2,432,830	313384GE3	26209	2,432,863
Federal National Mtg	USBT	1,387,000	0.065	10/28/2014	1,386,459	06/01/2015	61	0.065	1,386,861	313588GH2	26175	1,386,847
	Fund Total and Average	\$ 5,207,707	0.052		\$ 5,206,616		58	0.053	\$ 5,207,307			\$ 5,207,267
LEC Issue #1 2010E	B DS Fund											
US Bank Trust	USB	394	0.100	07/01/2013	394		1	0.100	394	SYS79004	79004	394
Federal Home Loan Ba	USBT	732,000	0.050	02/27/2015	731,911	05/26/2015	55	0.050		313384GB9	26202	731,944
Federal Home Loan Ba	USBT	2,229,000	0.035	03/27/2015	2,228,863	05/29/2015	58	0.035		313384GE3	26210	2,228,874
	Fund Total and Average	\$ 2,961,394	0.039	·	\$ 2,961,168		57	0.039	\$ 2,961,194			\$ 2,961,212
LEC Issue #2 2010A	DS Fund											. *
US Bank Trust	USB	177	0.100	07/01/2013	177		1	0.100	177	SYS79011	79011	177
Federal Home Loan Ba	USBT	434,000	0.049	02/27/2015	433,947	05/26/2015	55	0.050	433,974	313384GB9	26203	433,967
Federal Home Loan Ba	USBT	434,000	0.090	11/26/2014	433,803	05/27/2015	56	0,091	433,970	313384GC7	26182	433,939
Federal Home Loan Ba	USBT	2,081,000	0.035	03/27/2015	2,080,873	05/29/2015	58	0.035	2,080,854	313384GE3	26211	2,080,883
Federal National Mtg	USBT	868,000	0.065	10/28/2014	867,661	06/01/2015	61	0.065	867,913	313588GH2	26176 ,	867,904
	Fund Total and Average	\$ 3,817,177	0.050		\$ 3,816,461		58	0.050	\$ 3,816,888			\$ 3,816,870
LEC Issue #2 2010B	DS Fund											
US Bank Trust	USB	1,020	0.100	07/01/2013	1,020		1	0.100	1,020	SYS79012	79012	1,020
Federal Home Loan Ba	USBT	351,000	0.050	02/27/2015	350,957	05/26/2015	55	0.050	350,979	313384GB9	26204	350,973
Federal Home Loan Ba	USBT	1,071,000	0.035	03/27/2015	1,070,934	05/29/2015	58	0.035		313384GE3	26212	1,070,940
	Fund Total and Average	\$ 1,423,020	0.039		\$ 1,422,911		57	0.039	\$ 1,422,924			\$ 1,422,933
	GRAND TOTALS:	\$ 13,409,298	0.047		\$ 13,407,156		58	0.048	\$ 13,408,313.			\$ 13,408,282

\*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 03/31/2015

04/02/2015 2:13 pm



### Northern California Power Agency

Treasurer's Report 03/31/2015

LEC Issue #1 2010 DSR 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
	:										
US Bank Trust	USB	100,511	0.100	07/01/2013	100,511		1	0.100	100,511 SYS79005	79005	100,511
Federal Home Loan Mt	USB	4,181,000	0,580	05/30/2014	4,183,927	08/26/2016	513	0.548	4,171,509 3134G56B6	26135	4,182,834
Federal National Mtg	USB	4,170,000	0.875	05/30/2014	4,171,960	08/28/2017	880	0.977	4,175,213 3135GOMZ3	26136	4,171,455
:	Fund Total and Average	\$ 8,451,511	0.720		\$ 8,456,398		688	0.755	\$ 8,447,233		\$ 8,454,800
LEC lss#1 2010B E	BABS Subs Resv										
US Bank Trust	USB	2,260,973	0.100	07/01/2013	2,260,973		1	0.100	2,260,973 SYS79006	79006	2,260,973
	Fund Total and Average	\$ 2,260,973	0.100		\$ 2,260,973		1	0.100	\$ 2,260,973		\$ 2,260,973
LEC Issue #2 2010	B DSR BABS										
US Bank Trust	USB	1,086,450	0.100	07/01/2013	1,086,450	•	1	0.100	1,086,450 SYS79013	79013	1,086,450
	Fund Total and Average	\$ 1,086,450	0.100		\$ 1,086,450		1	0.100	\$ 1,086,450		\$ 1,086,450
	GRAND TOTALS:	\$ 11,798,934	0.544		\$ 11,803,821		493	0.569	\$ 11,794,656.	•	\$ 11,802,223

\*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 03/31/2015

Investment # 26135 - FHLMC - Callable semi-annually.



### Northern California Power Agency Treasurer's Report

03/31/2015

### 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
Local Agency Investm		1,699,393	0.254	07/01/2013	1,699,393		1	0.254	1,699,393	SYS70047	70047	1,699,393
Union Bank of Califo	UBOC	0	0.002	07/18/2013	0		1	0.002	0	SYS70041	70041	0
Federal Home Loan Mt	UBOC	3,000,000	0.500	10/25/2013	2,992,800	06/06/2016	432	0.592	2,999,970	3134G46A1	26052	2,996,748
Federal Home Loan Mt	UBOC	2,992,000	0,800	09/23/2014	2,991,102	12/23/2016	632	0.813	2,992,299	3134G5HP3	26162	2,991,311
Federal Farm Credit	UBOC	2,997,000	1.220	09/23/2014	2,998,499	09/18/2017	901	1.202	3,004,792	3133EDV74	26161	2,998,236
	Fund Total and Average	\$ 10,688,393	0.747		\$ 10,681,794		551	0.772	\$ 10,696,454		· · ·	\$ 10,685,688
	GRAND TOTALS:	\$ 10,688,393	0.747		\$ 10,681,794		551	0.772	\$ 10,696,454.			\$ 10,685,688

\*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 03/31/2015

Investment # 26052 – FHLMC - Callable Quarterly. Investment # 26161 – FFCB - Callable 9/18/2015, then anytime. Investment # 26162 – FHLMC –Callable Quarterly.



### Northern California Power Agency Treasurer's Report

. 03/31/2015

LEC GHG Auction Acct

lssuer	Trustee / Custodian	Stated	i Value	Interest Rate	Purchase Date	Purch: Pri		Maturity Date	Days to Maturity	Bond* Equiv Yield	Mark	et Value CUSIP	Investment #	Carr	ying Value
Local Agency Investm			70,913	0.254	07/01/2013		70,913		1	0.254		70,913 SYS70046	70046		70,913
	Fund Total and Average	\$	70,913	0.254		\$	70,913		1	0.254	\$	70,913		\$	70,913
	GRAND TOTALS:	\$	70,913	0.254		\$	70,913		1	0.254	\$	70,913.		\$	70,913

\*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 03/31/2015



651 Commerce Drive Roseville, CA 95678

phone(916) 781-3636fax(916) 783-7693webwww.ncpa.com

# **LEC Financial Reports**

AGENDA ITEM NO.: <u>8</u>

**Date:** April 7, 2015

Subject: March 31, 2015 Financial Reports (Unaudited)

# NORTHERN CALIFORNIA POWER AGENCY LODI ENERGY CENTER STATEMENT OF NET POSITION UNAUDITED

	March 3	1
ASSETS	2015	2014
CURRENT ASSETS		
Cash and cash equivalents	<b>\$ 70,913 \$</b>	70,750
Interest receivable	13,490	5,918
Inventory and supplies - at average cost	1,434,086	1,056,961
Prepaid insurance	-	777,268
Due from (to) Agency, net	19,678,391	20,434,819
TOTAL CURRENT ASSETS	21,196,880	22,345,716
RESTRICTED ASSETS		
Cash and cash equivalents	13,874,202	9,056,223
Investments	22,933,192	26,761,526
Interest receivable	9,413	17,416
TOTAL RESTRICTED ASSETS	36,816,807	35,835,165
ELECTRIC PLANT		
Electric plant in service	423,372,867	423,354,890
Less: accumulated depreciation	(34,083,639)	(19,484,707)
	389,289,228	403,870,183
Construction work-in-progress	28,604	-
TOTAL ELECTRIC PLANT	389,317,832	403,870,183
OTHER ASSETS		
Regulatory assets	15,387,780	13,975,094
TOTAL OTHER ASSETS	15,387,780	13,975,094
TOTAL ASSETS	\$ 462,719,299 \$	476,026,158

### NORTHERN CALIFORNIA POWER AGENCY LODI ENERGY CENTER STATEMENT OF NET POSITION UNAUDITED

	Mar	rch 31	
	 2015		2014
LIABILITIES & NET POSITION			
CURRENT LIABILITES			
Accounts and retentions payable	\$ 4,210,517	\$	5,345,905
Operating reserves	12,774,923		11,296,271
Current portion of long-term debt	9,025,000		8,640,000
Accrued interest payable	 5,772,651		5,941,986
TOTAL CURRENT LIABILITIES	 31,783,091		31,224,162
NON-CURRENT LIABILITIES			
Operating reserves and other deposits	982,027		70,654
Regulatory liability	45,700,235		45,132,945
Long-term debt, net	 372,138,412		382,116,184
TOTAL NON-CURRENT LIABILITIES	 418,820,674		427,319,783
TOTAL LIABILITIES	 450,603,765		458,543,945
NET POSITION			
Invested in capital assets, net of related debt	(10,385,973)		(5,767,971)
Restricted	7,640,728		2,117,394
Unrestricted	14,860,779		21,132,790
TOTAL NET POSITION	 12,115,534		17,482,213
TOTAL LIABILITIES AND NET POSITION	\$ 462,719,299	\$	476,026,158

### NORTHERN CALIFORNIA POWER AGENCY LODI ENERGY CENTER STATEMENT OF REVENUES, EXPENSES & CHANGES IN NET POSITION UNAUDITED

	 Nine Months Ended N 2015	March 31 2014
SALES FOR RESALE		
Participants	\$ 20,582,414 \$	28,014,061
Other	 55,171,238	54,374,019
TOTAL SALES FOR RESALE	 75,753,652	82,388,080
OPERATING EXPENSES		
Operations	42,066,521	39,921,471
Depreciation	10,949,284	10,948,833
Maintenance expenses	5,217,336	6,009,888
Administrative and general	3,490,023	4,041,109
Transmission	5,458,297	1,213,124
Intercompany (sales) purchases	358,816	331,790
TOTAL OPERATING EXPENSES	 67,540,277	62,466,215
NET OPERATING REVENUES	8,213,375	19,921,865
OTHER REVENUES (EXPENSES)		
Interest expense	(12,351,637)	(12,020,765)
Interest income	143,211	73,818
Other	3,202,310	1,590,911
TOTAL OTHER REVENUES (EXPENSES)	 (9,006,116)	(10,356,036)
FUTURE RECOVERABLE AMOUNTS	2,769,632	3,622,984
REFUNDS TO PARTICIPANTS	530,855	(1,185,594)
INCREASE IN NET POSITION	2,507,746	12,003,219
NET POSITION		
Beginning of year	 9,607,788	5,478,994
End of period	\$ 12,115,534 \$	17,482,213

### Lodi Energy Center FY 2015 Operating Costs As of March 31, 2015

Notes

A B

C D

							Т
	Ar	nual Budget		Actual	Remaining	YTD % Remaining	
Routine O&M Costs					<u> </u>		t
Variable	\$	3,651,332	\$	3,017,218	\$ 634,114	17%	
Fixed		1,765,358		1,630,846	134,512	8%	
Administration		1,250,914		951,599	299,315	24%	I
Mandatory Costs		220,000		81,860	138,140	63%	
Inventory Stock		400,000		262,728	137,272	34%	
Routine O&M Costs without Labor		7,287,604		5,944,251	1,343,353	18%	
Labor		4,299,182		2,918,605	1,380,577	32%	
Total Routine O&M Cost		11,586,786		8,862,856	2,723,930	24%	
Other Costs							
Fuel		41,167,130		37,545,451	3,621,679	9%	
CA ISO Charges		489,050		5,458,297	(4,969,247)	-1016%	
Debt Service		26,437,890		19,828,423	6,609,467	25%	
Insurance		1,000,425		798,950	201,475	20%	
Other Costs		51,781		31,428	20,353	39%	
Generation Services Shared		437,453		199,346	238,107	54%	
Administrative & General (Allocated)		1,728,654		1,092,073	636,581	37%	
Power Management Allocated Costs		1,187,916		890,937	296,979	25%	
Total O&M Cost		84,087,085		74,707,761	9,379,324	11%	
Projects							
Operations & Maintenance		332,500		9,688	322,812	97%	ļ
Capital		4,658,760		33,692	4,625,068	99%	
Maintenance Reserve		1,800,000		1,350,000	450,000	25%	
Total Projects		6,791,260		1,393,380	5,397,880	79%	
Annual Cost		90,878,345		76,101,141	14,777,204	16%	
Less: Third Party Revenue							ļ
Interest Income		44,489		63,798	(19,309)	-43%	
ISO Energy Sales		54,517,593		53,546,943	970,650	2%	
Ancillary Services Sales		1,420,431		1,624,295	(203,864)	-14%	
Other Income		-		750	(750)	N/A	
		55,982,513		55,235,786	746,727	1%	
Net Annnual Cost to Participants	\$	34,895,832	\$	20,865,355	\$ 14,030,477	40%	
Total Variable Costs		45,307,512		36,108,222	9,199,290		
Total Fixed Costs		45,570,833		39,992,919	5,577,914		
	\$	90,878,345	\$	76,101,141	\$ 14,777,204		
Net Cumulative Generation (MWh)		1,207,542		1,254,123			
Total O&M Cost Per MWh	¢	69.63	¢	59.57			
	\$		•				
Net Annual Cost Per MWh	\$	28.90	\$	16.64			

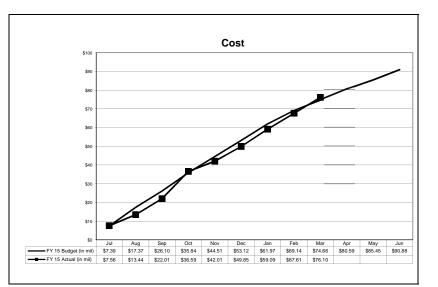
### Footnotes:

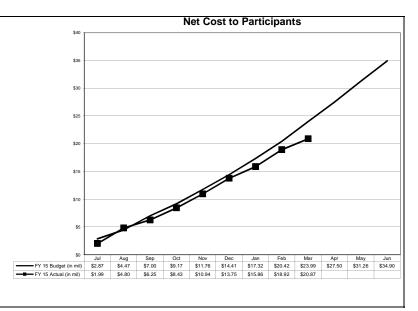
 ${\bf A}$  - Higher variable maintenance and chemical costs due to higher year to date generation.

 ${\bf B}$  - Higher costs due to repairs to boilers and turbines.

 ${\bf C}$  - Higher than budgeted fuel costs due to higher year to date generation offset by lower costs per mmBtu.

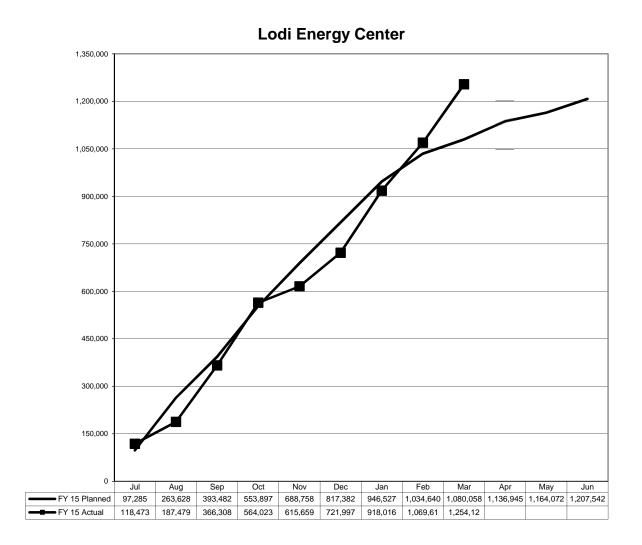
 ${\bf D}$  - Costs are higher than expected due to load balancing requirements at CA ISO.





### Annual Budget LEC Generation Analysis Planned vs. Actual FY 2015

In MWh



NCPA All Resources Bill LEC GHG Obligation Detail Report (Cumulative) April 2015																
IDENTIFIER	AZUSA	BART	BIGGS	CDWR	GRI	HEA	LOD	LOM	MID	PLU	PWRPA	SNCL	UKI	TOTAL	Charge Code	Source
Allocation Percentages																
Generation Entitlement Share %	2.7857%	6.6000%	0.2679%	33.5000%	1.9643%	1.6428%	9.5000%	2.0357%	10.7143%	0.7857%	2.6679%	25.7500%	1.7857%	100%		MARS
Obligation Accounts																
Current MT Compliance Obligation (MTO) Balance (MT)	28,794	68,220	2,769	346,268	20,304	16,981	98,195	21,042	110,747	8,121	27,576	266,161	18,458	1,033,635		derived
Current MT Compliance Instrument Account (MTA) Balance (MT)	24,130	73,032	3,609	456,463	26,050	21,352	105,399	29,372	113,116	8,122	29,081	284,229	20,355	1,194,310		derived
MTA Shortfall (MT)	4,664	(4,812)	(840)	(110,195)	(5,747)	(4,371)	(7,204)	(8,331)	(2,369)	(0)	(1,505)	(18,068)	(1,898)	(160,675)	MTA SHORTFALL	Derived
Monthly GHG Price \$/MT	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	MTA SHORTFALL	ICE Index
GHG Minimum Cash Compliance Obligation (\$)	58,297	0	0	0	0	0	0	0	0	0	0	0	0	58,297	MTA SHORTFALL	Derived
Current Month CCA Balance (\$)*	60,991	0	143	0	1,103	4,780	755	0	0	0	0	0	2,652	70,424	CCA BALANCE	Accounting
Net GHG Obligation (\$)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NET GHG OBLIG	Derived

\* The Current Month CCA Balance (\$) consists of the current cash balance plus any outstanding balance of Net GHG Obligation (\$) billed but not yet received.

			2013 N	ICPA All R		ill LEC GHG		Instrument Detail	Report					
		Actual												Compliance Year 2013
IDENTIFIER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	Total
Energy (MWh)	0	82,787	101,925	128,167	134,284	32,545	80,153	122,492	94,615	92,091	98,739	105,078	138,068	1,210,944
Gas Schedule (MMBtu)	0	593,484	723,038	894,657	952,529	229,724	579,650	870,331	673,965	650,250	692,396	738,008	965,292	8,563,324
Emissions Factor (MT/MMBtu)	0	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	
Monthly MT Emissions (MT)	0	32,027	39,019	48,280	51,403	12,397	31,281	46,967	36,371	35,091	37,365	39,827	52,092	462,120
Cumulative MT Obligation (MT)	0	32,027	71,046	119,326	170,730	183,127	214,407	261,375	297,745	332,836	370,201	410,028	462,120	462,120
Compliance Instrument Participant Transfers (to LEC)														
Auction Allowances	92,695	5,350	0	13,644	105,000	50,632	30,628	1,600	102,200	12,594	0	0	46,290	460,633
Secondary Market Allowances	0	0	0	0	0	0	0	0	0	0	0	0	C	0 0
Reserve Sale Allowances	0	0	0	0	0	0	0	0	0	0	0	0	C	0 0
Offsets	0	0	0	0	0	0	0	0	0	0	0	0	C	0
Total Compliance Instrument Participant Transfers (MT)	92,695	5,350	0	13,644	105,000	50,632	30,628	1,600	102,200	12,594	0	0	46,290	460,633
NCPA Compliance Instrument Purchases (for LEC)														
Auction Purchases	47,000	0	0	0	0	0	0	0	0	0	0	0	0	47,000
Secondary Market Purchases	0	0	0	0	0	0	0	0	0	0	0	0	C	0 0
Reserve Sale Purchases	0	0	0	0	0	0	0	0	0	0	0	0	C	0
Offset Purchases	0	0	0	0	0	0	0	0	0	0	0	0	C	0
Total NCPA Compliance Instrument Purchases (MT)	47,000	0	0	0	0	0	0	0	0	0	0	0	C	47,000
Compliance Instruments Surrendered to CARB (MT)	0	0	0	0	0	0	0	0	0	0	0	0	C	0
Total Monthly Activity (MT)	139.695	5.350	0	13,644	105.000	50.632	30,628	1.600	102.200	12,594	0	0	46,290	507.633
Cumulative MT Account Balance [MTA] (MT)	139,695	145,045	145,045	,	263,689	314,321	344,949	346,549	- ,	,	461,343	461,343	507,633	,
MTA Shortfall (MT)	(139,695)	(113,018)	(73,999)	(39,363)	(92,959)	(131,194)	(130,542)	(85,174)	(151,004)	(128,507)	(91,142)	(51,315)	(45,513)	(45,513)

2013 NCPA All Resources Bill LEC GHG Compliance Instrument Detail Report				2	2014 NCPA All		LEC GHG Cor he Lodi Energy		ment Detail Repo	rt			
	Actual												
IDENTIFIER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	Total
Energy (MWh)	136,604	156,089	120,489	55,378	71,210	51,037	118,473	69,006	178,831	197,715	51,636	106,338	1,312,806
Gas Schedule (MMBtu)	951,700	1,092,730	858,805	391,272	512,068	371,695	836,762	496,327	1,251,547	1,371,546	372,826	759,691	9,266,969
Emissions Factor (MT/MMBtu)	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	
Monthly MT Emissions (MT)	51,358	58,969	46,345	21,115	27,634	20,059	45,156	26,784	67,540	74,015	20,120	40,997	500,092
Cumulative MT Obligation (MT)	513,478	572,447	618,793	639,908	667,542	687,600	732,756	759,540	827,080	901,095	782,299	823,296	823,296
Compliance Instrument Participant Transfers (to LEC)													
Auction Allowances	102,347	50,000	48,066	25,000	1,290	138,448	0		13,586	50,520	100,350	350	529,957
Secondary Market Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Allowances	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsets	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Compliance Instrument Participant Transfers (MT)	102,347	50,000	48,066	25,000	1,290	138,448	0	0	13,586	50,520	100,350	350	529,957
NCPA Compliance Instrument Purchases (for LEC)													
Auction Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Secondary Market Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve Sale Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Offset Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NCPA Compliance Instrument Purchases (MT)	0	0	0	0	0	0	0	0	0	0	C	0	0
Compliance Instruments Surrendered to CARB (MT)	0	0	0	0	0	0	0	0	0	0	138,916	0	138,916
Total Monthly Activity (MT)	102,347	50,000	48,066	25,000	1,290	138,448	0	0	13,586	50,520	100,350	350	529,957
Cumulative MT Account Balance [MTA] (MT)	609,980	659,980	708,046	733,046	734,336	872,784	872,784	872,784	886,370	936,890	898,324	898,674	898,674
MTA Shortfall (MT)	(96,502)	(87,533)	(89,253)	(93,138)	(66,794)	(185,184)	(140,028)	(113,244)	(59,290)	(35,795)	(116,025)	(75,378)	(75,378)

Compliance Instrument Detail Report	2015 NCPA All Resources Bill LEC GHG Compliance Instrument Detail Report for the Lodi Energy Center									
	Actual		Estimated				Compliance Year 2015	Cumulative Totals		
IDENTIFIER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	Total	Total	Charge Code	Source
Energy (MWh)	196.019	151,600	103,992	103,992	63,952	83,416	702.973	3.226.723		Forecast/Meter
Gas Schedule (MMBtu)	1,368,474	1,073,330	727,946	727,946	447,667	583,914	4,929,277	22,759,570		Forecast/Meter
Emissions Factor (MT/MMBtu)	0.054	0.054	0.054	0.054	0.054	0.054	.,,			MARS
Monthly MT Emissions (MT)	73,850	57,922	39,284	39,284	24,158	31,511	266,008	1,228,220		derived
Cumulative MT Obligation (MT)	897,145	955,068	994,351	1,033,635	1,057,793	1,089,304	1,089,304	2,374,720		derived
Compliance Instrument Participant Transfers (to LEC)										
Auction Allowances	41,342	250	249,743	0	0	0	291,335	1,281,925		CITSS
Secondary Market Allowances	0	0	0	0	0	0	0	0		CITSS
Reserve Sale Allowances	0	0	0	0	0	0	0	0		CITSS
Offsets	0	0	0	0	0	0	0	0		CITSS
Total Compliance Instrument Participant Transfers (MT)	41,342	250	249,743	0	0	0	291,335	1,281,925		
NCPA Compliance Instrument Purchases (for LEC)										
Auction Purchases	0	0	0	0	0	0	0	47,000		CITSS
Secondary Market Purchases	0	0	0	0	0	0	0	0		CITSS
Reserve Sale Purchases	0	0	0	0	0	0	0	0		CITSS
Offset Purchases	0	0	0	0	0	0	0	0		CITSS
Total NCPA Compliance Instrument Purchases (MT)	0	0	0	0	0	0	0	47,000		
Compliance Instruments Surrendered to CARB (MT)	0	0	0	0	0	0	0	138,916		CITSS
Total Monthly Activity (MT)	41,342	250	249,743	0	0	0	0 291,335	1,328,925		derived
Cumulative MT Account Balance [MTA] (MT)	940,016	940,266	1,190,009	1,190,009	1,190,009	1,190,009	,	1,190,009		derived
MTA Shortfall (MT)	(42,871)	14,802	(195,658)	(156,374)	(132,216)	(100,705)	(100,705)	1,184,711	MTA SHORTFALL	derived



## Lodi Energy Center Project Participant Committee

# **Staff Report**

AGENDA ITEM NO.: 10

 Date:
 April 8, 2015

 To:
 Lodi Energy Center Project Participant Committee

 Subject:
 American Exchanger Services, Inc. Agreement for Maintenance and Inspection Services – All NCPA Facility Locations

### Proposal

Approve a Multi-Task General Services Agreement with American Exchanger Services, Inc. for an amount not-to-exceed \$300,000 over five years, for maintenance and inspection services on heat exchangers, condensers, and chillers as needed at all NCPA locations.

### Background

Various maintenance and inspection services are required at the NCPA locations from time to time. American Exchanger Services, Inc. is a provider of these services. This enabling agreement will allow staff to utilize its services on an as-needed basis.

# Selection Process

This five year contract does not commit NCPA to any expenditure of funds. When work is required, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. In addition to American Exchanger Services, Inc., NCPA currently has entered into another enabling agreement with American Cooling Tower for similar services. In addition, it seeks bids from as many qualified contractors as possible. The bid is awarded to the lowest cost provider. NCPA will issue purchase orders based on cost and availability of the services needed at the time work is required.

### Fiscal Impact

The total cost of this five year agreement is not-to-exceed \$300,000 to be used out of NCPA approved budgets as services are rendered. Purchase orders referencing the terms and conditions of the Agreement will be issued following NCPA procurement policies and procedures.

### **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

American Exchanger Services, Inc. April 8, 2015 Page Two

The recommendation below was reviewed by the Facilities Committee on April 1, 2015 and was recommended for Commission approval.

### **Recommendation**

Staff recommends that the PPC pass a motion approving the Multi-Task General Services Agreement with American Exchanger Services, Inc., with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$300,000 over five years.

Prepared by:

/s/

KEN SPEER Assistant General Manager Generation Services

Attachment: (1)

• Multi-Task General Services Agreement with American Exchanger Services, Inc.



## MULTI-TASK GENERAL SERVICES AGREEMENT BETWEEN THE NORTHERN CALIFORNIA POWER AGENCY AND AMERICAN EXCHANGER SERVICES, INC.

This agreement for general services ("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 American Exchanger Services, Inc., a corporation with its office located at 709 West Wisconsin, Hartford, Wisconsin 53027 ("Contractor") (together sometimes referred to as the "Parties") as of \_\_\_\_\_\_, 2015 ("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** <u>**Term of Agreement.**</u> 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** <u>Standard of Performance.</u> 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** <u>Assignment of Personnel.</u> 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 <u>Request for Work to be Performed.</u> 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.

<u>Section 2.</u> <u>COMPENSATION.</u> Agency hereby agrees to pay Contractor an amount NOT TO EXCEED THREE HUNDRED THOUSAND dollars (\$300,000.00) 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 <u>Invoices.</u> 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;
  - 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

- 2.2 <u>Monthly Payment.</u> 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** <u>**Payment of Taxes.**</u> Contractor is solely responsible for the payment of all federal, state and local taxes, including employment taxes, incurred under this Agreement.
- 2.4 <u>Authorization to Perform Work.</u> 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 <u>Timing for Submittal of Final Invoice</u>. 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 <u>Workers' Compensation.</u> 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 <u>Commercial General and Automobile Liability Insurance.</u>

- **4.2.1** <u>Commercial General Insurance</u>. 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** <u>Automobile Liability</u>. 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** <u>General Liability/Umbrella Insurance.</u> 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 <u>Professional Liability Insurance.</u> Intentionally left blank.
- 4.4 <u>All Policies Requirements.</u>
  - **4.4.1** <u>Verification of coverage.</u> 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, adding the

Agency as an additional insured and declaring such insurance primary in regard to work performed pursuant to this Agreement.

- **4.4.2** 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.
- **4.4.3** <u>Higher Limits.</u> 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 <u>Waiver of Subrogation.</u> 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. 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 ensues 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 <u>Effect of Insurance.</u> 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** <u>Scope.</u> 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.

## Section 6. STATUS OF CONTRACTOR.

6.1 <u>Independent Contractor.</u> 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 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.

- 6.2 <u>Contractor Not Agent.</u> 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 <u>Assignment and Subcontracting.</u> 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 <u>Certification as to California Energy Commission.</u> If requested by the Agency, Contractor shall, at the same time it executes this Agreement, execute Exhibit C.

## Section 7. LEGAL REQUIREMENTS.

- 7.1 <u>Governing Law.</u> The laws of the State of California shall govern this Agreement.
- **7.2** <u>Compliance with Applicable Laws.</u> Contractor and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- **7.3** <u>Licenses and Permits.</u> 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 <u>Work Requiring Payment of Prevailing Wages.</u> If applicable, 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 these services are to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in the California Labor Code shall be paid to all workers engaged in performing the services under this Agreement.

## Section 8. TERMINATION AND MODIFICATION.

8.1 <u>Termination</u>. 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** <u>Amendments.</u> The Parties may amend this Agreement only by a writing signed by all the Parties.
- **8.3** <u>Survival.</u> 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 <u>Options upon Breach by Contractor.</u> 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. In the event of a dispute regarding the amount of this charge, the Parties shall exhaust the alternative dispute resolution process provided under Section 13.11 of this Agreement prior to any initiation of legal action.

# Section 9. KEEPING AND STATUS OF RECORDS.

- **9.1** <u>Records Created as Part of Contractor's Performance.</u> 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.</u>
- **9.2** <u>Contractor's Books and Records.</u> 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 to 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 the Agreement.

## 9.4 <u>Confidential Information and Disclosure.</u>

- **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 confident; 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, 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. Conclusion of Agreement. Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof) upon termination of this Agreement, 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, Contractors, contractors and subcontractors who have a need to know in connection with this Agreement.

## Section 10. PROJECT SITE.

- 10.1 <u>Operations at the Project Site.</u> 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 Agency's operations and the operations of 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. Agency will not 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. Agency may assume that anything left on the Project site an unreasonable length of time after the Work is completed has been abandoned. Any transportation furnished by Agency shall be solely as an accommodation and Agency shall have no 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** <u>Use of Agency Equipment.</u> Contractor shall assume the risk and is solely responsible for its use of any Agency owned equipment and property provided by Agency for the performance of Work.

# Section 11. WARRANTY.

- **11.1** <u>Nature of Work.</u> 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** <u>Assignment of Warranties.</u> 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 Agency site programs.
  - **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 to include diesel fuel used for trucks owned or leased by the Contractor.

## Section 13 MISCELLANEOUS PROVISIONS.

- **13.1** <u>Attorneys' Fees.</u> 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** <u>Venue.</u> 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** <u>Severability.</u> 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** <u>No Implied Waiver of Breach.</u> 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** <u>Successors and Assigns.</u> 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** <u>Conflict of Interest.</u> 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** <u>Contract Administrator.</u> 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** <u>Notices.</u> Any written notice to Contractor shall be sent to:

American Exchanger Services, Inc. Attn: Joe Bruno / Thomas J Muldoon 709 West Wisconsin Hartford, Wisconsin 53027

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:

Michael F. Dean General Counsel Northern California Power Agency Meyers Nave 555 Capitol Mall, Suite 1200 Sacramento, CA 95814

- **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** <u>Integration; Incorporation.</u> 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** <u>Alternative Dispute Resolution</u>. 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 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** <u>Controlling Provisions</u>. In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's Proposal (if any), this Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's Proposal, the Exhibits shall control.
- **13.13** <u>Counterparts.</u> 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** <u>No Third Party Beneficiaries.</u> This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties.

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

NORTHERN CALIFORNIA POWER AGENCY

AMERICAN EXCHANGER SERVICES, INC.

Date\_\_\_\_\_

Date\_\_\_\_\_

RANDY S. HOWARD, General Manager

JOE BRUNO, VP Sales

Attest:

Assistant Secretary of the Commission Approved as to Form:

Assistant General Counsel

# EXHIBIT A

# SCOPE OF WORK

American Exchanger Services, Inc. ("Contractor") will provide maintenance and inspection services to the Northern California Power Agency ("Agency") facilities as requested by the Agency.

Types of services to be provided include, but are not be limited to:

- Maintenance, Inspections, Troubleshooting of
  - o Heat Exchangers
  - o Condensers
  - o Chillers

## 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 of this Agreement. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

EFFECTIVE: 1-Jan-2015 to	31-Mar-2015 Rev 0	
Base Labor Rates per Non-Union Technician	US \$	
Straight Time shop rates (not including machinist or welder time)	\$59.25 /hr	
<ul> <li>Straight Time Field (8 hours/day; 40 hours/week)</li> </ul>	\$64.50 /hr	
Over Time Field per Technician	\$90.25 /hr	
Double Time Field on Sundays and Holidays	\$115.75 /hr	
<ul> <li>Travel Time from &amp; to Shop</li> </ul>	\$50.00 /hr	
<ul> <li>Standby Time (maximum of 8 hours / day)</li> </ul>	\$64.50 /hr	
Base Labor Rates per Supervisor or Welder (if required)		
<ul> <li>Straight Time (8 hours/day; 40 hours/week)</li> </ul>	\$80.75 /hr	
Over Time per Technician	\$113.50 /hr	
<ul> <li>Double Time on Sundays and Holidays</li> </ul>	\$145.25 /hr	
<ul> <li>Travel Time from &amp; to Shop &amp; Shop Time</li> </ul>	\$73.75 /hr	
<ul> <li>Standby Time (maximum of 8 hours / day)</li> </ul>	\$80.75 /hr	
Expenses		
<ul> <li>Per Diem (Meals &amp; Misc Living Expenses) will be billed at</li> </ul>	\$50.00 /day	
· Expenses -including FRT & motel, etc.costs billed at cost plus	10%	
<ul> <li>Subcontractor costs shall be billed out at cost plus</li> </ul>	15%	
Mileage billed (based on Vehicle(s) used) (rate per mile)	\$0.70 Van	
	\$0.58 Car	
	\$1.25 Flat Bed Tru	

## 3) Explosively Welded Tube Plug Pricing

Price for explosively welded tube plugs
 \$99.00 Each

· Special Plugs and quantity discounts quoted upon need and request.

All prices and expenses are based on time and expenses incurred from the time the crew leaves the shop in Hartford, WI until they return. Specialized tooling prices can be provided upon request.

- Contractor will notify Agency in writing 30 days prior to any rate increases.
- 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, JOE BRUNO, VP Sales

(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

American Exchanger Services, 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 \_\_\_\_\_\_, 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.

2394760.5



## Lodi Energy Center Project Participant Committee

# Staff Report

AGENDA ITEM NO.: 11

Date:	April 8, 2015
To:	Lodi Energy Center Project Participant Committee
Subject:	Sulzer Turbo Services Houston, Inc. Agreement for Inspections and Maintenance Services on the Gas, Steam and Hydro Turbines – All NCPA Facility Locations

## <u>Proposal</u>

Approve a five year Multi-Task General Services Agreement and Agreement for Purchase of Equipment, Materials and Supplies with Sulzer Turbo Services Houston, Inc. in an amount not-to-exceed One Million Five Hundred Thousand Dollars (\$1,500,000) for inspections, maintenance services, and purchase of materials and supplies for gas, steam and hydro turbines as needed at all NCPA Generation Services facility locations.

## **Background**

The NCPA facilities periodically require various inspections and maintenance services and materials and supplies for the gas, steam and hydro turbines. Sulzer Turbo Services Houston, Inc. is a provider of these services and materials. This agreement will enable staff to utilize Sulzer's services and purchase materials on an as-needed basis.

## Selection Process

This five year contract does not commit NCPA to any expenditure of funds. When services or materials and supplies are required, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. In addition to Sulzer Turbo Services Houston, Inc., NCPA currently has entered into an enabling agreement with Universal Plant Services for similar work. In addition, it seeks bids from as many qualified contractors and suppliers as possible. The bid is awarded to the lowest cost provider. NCPA will issue purchase orders based on cost and availability of the services and/or materials needed at the time.

## Fiscal Impact

Upon execution, the total cost of the agreement is not-to-exceed \$1,500,000 over five years to be used out of NCPA approved budgets as services are rendered. Purchase orders referencing the terms and conditions of the Agreement will be issued following NCPA procurement policies and procedures.

## 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.

Sulzer Turbo Services Houston, Inc. April 8, 2015 Page Two

Committee Review

The recommendation below was reviewed by the Facilities Committee on April 1, 2015 and was recommended for Commission approval.

#### Recommendation

Staff recommends that the PPC pass a motion approving the Multi-Task General Services Agreement and Agreement for Purchase of Equipment, Materials and Supplies with Sulzer Turbo Services Houston, Inc., with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,500,000 over five years.

Prepared by:

/s/

KEN SPEER Assistant General Manager Generation Services

Attachment: (1)

• Multi-Task General Services Agreement and Agreement for Purchase of Equipment, Materials and Supplies with Sulzer Turbo Services Houston, Inc.



## MULTI-TASK GENERAL SERVICES AGREEMENT AND AGREEMENT FOR PURCHASE OF EQUIPMENT, MATERIALS AND SUPPLIES BETWEEN THE NORTHERN CALIFORNIA POWER AGENCY AND SULZER TURBO SERVICES HOUSTON, INC.

This agreement for general services and purchase of equipment, materials, and supplies ("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 Sulzer Turbo Services Houston, Inc., a Delaware corporation with its office located at 11518 Old La Porte Road, La Porte, TX 77571 ("Contractor"), (together sometimes referred to as the "Parties") as of \_\_\_\_\_\_, 2014 ("Effective Date") in Roseville, California.

<u>Section 1.</u> <u>SCOPE OF WORK</u>. 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 (both services and goods collectively referred to as "Work" herein). Contractor shall deliver the Goods, as further specified in Exhibit B to this Agreement, and title for Goods shall not pass until the Agency accepts delivery at Agency's Project Site and has paid for the Goods.

- **1.1** <u>**Term of Agreement.**</u> The term of this Agreement shall begin on the Effective Date and shall end five (5) years from the date this Agreement was signed by Agency.
- **1.2** <u>Standard of Performance.</u> 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** <u>Assignment of Personnel.</u> 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 <u>Request for Work to be Performed.</u> 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.

<u>Section 2.</u> <u>COMPENSATION.</u> 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,

Multi-Task General Services Agreement between

Northern California Power Agency and Sulzer Turbo Services Houston, Inc. 6/25/12

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 <u>Invoices.</u> 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 Work other than that done on a fixed-price/lump sum basis agreed to by the Parties, 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;
  - At Agency's option for Work other than that done on a fixed-price/lump sum basis agreed to by the Parties, 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

- 2.2 <u>Monthly Payment.</u> 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. Agency shall provide Contractor with any applicable tax-exemption information for the Work.
- 2.4 <u>Authorization to Perform Work.</u> 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 <u>Timing for Submittal of Final Invoice</u>. 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.

<u>Section 4.</u> <u>INSURANCE REQUIREMENTS.</u> 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 <u>Workers' Compensation.</u> 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 <u>Commercial General and Automobile Liability Insurance.</u>

- **4.2.1** <u>Commercial General Insurance</u>. 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 of no more than \$100,000. Contractor agrees that it shall not allow endorsements or other modifications which will materially and adversely affect or eliminate the coverage required herein.
- **4.2.2** <u>Automobile Liability</u>. 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 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** <u>General Liability/Umbrella Insurance.</u> 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 <u>Professional Liability Insurance.</u> [Intentionally omitted.]

# 4.4 <u>All Policies Requirements.</u>

- **4.4.1** <u>Verification of coverage.</u> 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, adding the Agency's status as an additional insured, which status as an additional insured shall be limited to the extent, and only to the extent, of Contractor's indemnity obligations under this Agreement, and declaring such insurance primary in regard to work performed pursuant to this Agreement.
- **4.4.2** 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** <u>Waiver of Subrogation.</u> 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. 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 ensues 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 <u>Effect of Insurance</u>. 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. The indemnification and hold harmless clause in this Section 5 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** <u>Scope.</u> 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 (for purposes of this section, "Claims"), to the extent Claims arise out of or in connection with the negligence, recklessness or willful misconduct of Contractor, its officers, officials, agents, and employees.

# Section 6. STATUS OF CONTRACTOR.

6.1 <u>Independent Contractor.</u> 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 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.

- 6.2 <u>Contractor Not Agent.</u> 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** <u>Assignment and Subcontracting.</u> 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 <u>Certification as to California Energy Commission.</u> If requested by the Agency, Contractor shall, at the same time it executes this Agreement, execute Exhibit C.

## Section 7. LEGAL REQUIREMENTS.

- 7.1 <u>Governing Law.</u> The laws of the State of California, excluding its conflict of laws provisions, shall govern this Agreement. The United Nations Convention on Contracts for the International Sale of Goods is specifically rejected.
- **7.2** <u>Compliance with Applicable Laws.</u> Contractor and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- **7.3** <u>Licenses and Permits.</u> 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 <u>Work Requiring Payment of Prevailing Wages.</u> If applicable, 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 these services are to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in the California Labor Code shall be paid to all workers engaged in performing the services under this Agreement.

## Section 8. TERMINATION AND MODIFICATION.

8.1 <u>Termination</u>. 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 identified as deliverable pursuant to Section 9.1 of this Agreement.

- **8.2** <u>Amendments.</u> The Parties may amend this Agreement only by a writing signed by all the Parties.
- 8.3 <u>Survival.</u> 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. In case of breach by Contractor, Agency shall be entitled to cancel the Purchase Order, but only if (1) Contractor's breach is of material nature, (2) Agency has given 10 days prior written notice (or such longer time as may be determined by Agency) to Contractor of such breach and (3) Contractor does not cure, or substantially commence and diligently pursue cure of, the breach to Agency's reasonable satisfaction within that period, or such longer period as Agency may determine. If part of the goods or supplies delivered by Contractor to Agency can and will be used by Agency, Contractor shall be entitled to be paid for that part a fair and equitable price, as agreed upon by the Parties. Parts of the Work which will not be bought by Agency shall be returned to Contractor at Contractor's costs, and Contractor shall reimburse the Purchase Order price that was received for such parts.

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 (after complying with the notice and cure procedures described above) include:

8.4.1 Immediately terminate the Agreement;

8.4.2 Retain the plans, specifications, drawings, reports, design documents, and any other work product expressly specified as deliverable and prepared by Contractor pursuant to this Agreement; and/or

8.4.3 Retain a different Contractor to complete the Work not finished by Contractor.

## Section 9. KEEPING AND STATUS OF RECORDS.

**9.1** <u>Records Created as Part of Contractor's Performance.</u> Subject to any rights, title or interests expressly granted by this Agreement, no party shall acquire any right, title, or interest in or to any intellectual property (including, without limitation, patents, copyright and trade secrets) of any other party. In addition, nothing herein shall be construed to mean that Contractor's patterns, tools, equipment, shop drawings, or any other item not specified as deliverable shall be or become the property of Agency or that Contractor shall be required to deliver such items unless expressly identified as a deliverable. All discoveries, inventions, developments, improvements and techniques pertaining to Contractor 's products or services (whether or not capable of patent or like protection) which Contractor or employees, agents, or subcontractors of Contractor may conceive or make alone or with others and which may directly or indirectly result from or in the performance

of the work by Contractor, shall be the sole and absolute property of Contractor. Contractor will document all Work performed for Agency to the extent reasonably possible and as otherwise required by the Agreement. Notwithstanding the preceding, Contractor grants to Agency a perpetual, royalty-free, non-exclusive license to use and reproduce such discoveries, inventions, developments, improvements, and techniques to the extent necessary for the operation, maintenance, and repair of the Work delivered pursuant to this Agreement.

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 (1) Contractor prepares pursuant to this Agreement, (2) are expressly identified as deliverable, and (3) that relate to the matters covered hereunder, shall be the property of the Agency. Contractor hereby agrees to deliver those deliverable documents to the Agency upon termination of the Agreement.

- **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 to 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 the Agreement.

## 9.4 <u>Confidential Information and Disclosure.</u>

**9.4.1** <u>Confidential Information.</u> 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 confident; 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, 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. Conclusion of Agreement. Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof) upon termination of this Agreement, 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, Contractors, contractors and subcontractors who have a need to know in connection with this Agreement.

# Section 10. PROJECT SITE.

**10.1** <u>Operations at the Project Site.</u> 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 Agency's operations and the operations of 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. Agency shall (1) immediately notify Contractor of any contamination that may exist in any part of its facility or on the equipment where Work may or is being performed where such contamination may be due to any hazardous material, including but not limited to, asbestos containing parts, insulation or gaskets or nuclear radiation and (2) be obligated, at its own expense, to decontaminate its facility or parts of the equipment to be repaired or replaced hereunder, which may be contaminated due to any hazardous material, so that such hazardous material shall be reduced or eliminated to a level in which the facility is safe to occupy and/or such parts may be handled and/or shipped in a safe manner and in accordance with all applicable laws and regulations and industry accepted standards without special licensing from any government regulatory authority. Notwithstanding anything contained in this Agreement to the contrary, until the decontamination or radioactive environment has been reduced to a safe, legal and industry accepted standard for occupancy by Contractor's personnel without the need for special protective clothing, Contractor shall be under no obligation to remove, disassemble, repair, reassemble or reinstall or provide any other service to such equipment.

- 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. Agency will not 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. Agency may assume that anything left on the Project site an unreasonable length of time after the Work is completed has been abandoned. Any transportation furnished by Agency shall be solely as an accommodation and Agency shall have no 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** <u>Use of Agency Equipment.</u> Contractor shall assume the risk and is solely responsible for its use of any Agency owned equipment and property provided by Agency for the performance of Work.

## Section 11. WARRANTY.

11.1 <u>Nature of Work.</u> Contractor warrants that all Work shall be free from defects in design (if the design is by Contractor) 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. The warranty period shall be twelve (12) months, which starts upon completion of the Work. Contractor shall be responsible for uncovering, gaining access to ,removing and replacing any portion of the Work necessitated by the warranty set forth herein, provided that if after such uncovering and gaining access, it is found that Contractor's Work is not responsible for the event or events that caused the need for repairs, Agency and Contractor shall work together in good faith to reimburse or to credit Contractor for its reasonable, actual and direct costs for the uncovering and gaining access.

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 reasonable written notice from Agency, replace or repair the same to Agency's reasonable satisfaction.

For that parts of the Work that have been replaced or repaired under the warranty, the warranty period will commence again and be for a period not to exceed six (6) months after replacement or completion of the repair or replacement, in any case no longer than for a period of twelve (12) months calculated from the end of the warranty period referred to above.

The warranty contained in this section will terminate immediately if Agency or a third party undertakes inappropriate or improper modification or repairs or if Agency, in case of a defect, does not take timely and appropriate steps to mitigate damages and notify Contractor in writing of its obligations to remedy such defect.

Excluded from Contractor's warranty are deficiencies caused by design of the equipment (unless Contractor provided the design), normal wear and tear, improper maintenance, Agency's failure to observe the written operating instructions. Contractor explicitly excludes any warranty for erosion or corrosion. Correction of nonconformities in the manner and for the period of time provided above shall constitute fulfillment of all liabilities of Contractor to Agency, whether based on contract, negligence or otherwise, with respect to goods delivered and/or services performed.

CONTRACTOR MAKES NO OTHER WARRANTY OR REPRESENTATION WITH REGARD TO THE WORK OTHER THAN AS SPECIFIED IN THIS SECTION. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. **11.3** <u>Assignment of Warranties.</u> To the fullest extent possible, 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.

<u>Section 12.</u> <u>HEALTH AND SAFETY PROGRAMS.</u> 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 Agency site programs.

- **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 to include diesel fuel used for trucks owned or leased by the Contractor.

## Section 13 MISCELLANEOUS PROVISIONS.

- **13.1** <u>Attorneys' Fees.</u> 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** <u>Venue.</u> 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** <u>Severability.</u> 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** <u>No Implied Waiver of Breach.</u> 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** <u>Successors and Assigns.</u> 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** <u>Conflict of Interest.</u> 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** <u>Contract Administrator.</u> 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** <u>Notices.</u> Any written notice to Contractor shall be sent to:

Sulzer Turbo Services Houston, Inc. Attention: Tony Dunkle 11518 Old La Porte Road La Porte, TX 77571

With a copy to:

Sulzer Turbo Services Houston, Inc. Attention: Legal Counsel 11518 Old La Porte Road La Porte, TX 77571

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:

Michael F. Dean General Counsel Northern California Power Agency Meyers Nave 555 Capitol Mall, Suite 1200 Sacramento, CA 95814

- **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** <u>Integration; Incorporation.</u> This Agreement, including Exhibits A, B, and C, 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** <u>Alternative Dispute Resolution</u>. 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 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** <u>Controlling Provisions</u>. In the case of any conflict between the terms of this Agreement, and the Exhibits hereto, and Contractor's Proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's Proposal, the Exhibits shall control.
- **13.13** <u>Counterparts.</u> 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** <u>Construction of Agreement.</u> 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** <u>No Third Party Beneficiaries.</u> This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties.
- 13.16 <u>Limitation of Liability</u>. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS CONTRACT, INCLUDING ALL DOCUMENTS MAKING PART THEREOF AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR LOSS OF PROFIT OR REVENUE, LOSS OF USE, INTERRUPTION OF PRODUCTION, COST OF CAPITAL, COST OF PURCHASED OR REPLACEMENT POWER, ANY AND ALL COSTS RELATING TO DELAY, OR FOR INDIRECT, PUNITIVE, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR CLAIMS BY AGENCY'S CUSTOMERS FOR SUCH DAMAGES, IN CONNECTION WITH THIS AGREEMENT, WHETHER SUCH LIABILITY IS BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STATUTE OR ANY OTHER BASIS OF LEGAL LIABILITY.

THE AGGREGATE TOTAL LIABILITY OF EITHER PARTY WITH RESPECT TO CLAIMS ARISING OUT OF OR RELATING, IN ANY MANNER, TO THE PERFORMANCE OR NON-PERFORMANCE OF OBLIGATIONS IN CONNECTION WITH THIS AGREEMENT OR THE PERFORMANCE OR NON-PERFORMANCE OF THE WORK, WHETHER BASED ON CONTRACT, WARRANTY, GUARANTEE, TORT (INCLUDING NEGLIGENCE, STRICT LIABILITY OR OTHERWISE) (FOR PURPOSES OF THIS PARAGRAPH, "CLAIMS"), SHALL NOT EXCEED TWO MILLION DOLLARS (\$2,000,000) PER CALENDAR YEAR; PROVIDED, HOWEVER, THAT WHERE A CLAIM ARISES FROM A PARTICULAR PURCHASE ORDER THAT IS IN AN AMOUNT GREATER THAN TWO MILLION DOLLARS (\$2,000,000), THE TOTAL LIABILITY OF EITHER PARTY UNDER THAT PARTICULAR PURCHASE ORDER SHALL NOT EXCEED TWO MILLION DOLLARS (\$2,000,000) OR THE AMOUNTS PAID TO CONTRACTOR FOR THE PERFORMANCE OF THE WORK PURSUANT TO THAT PARTICULAR PURCHASE ORDER, WHICHEVER IS GREATER.

FOR THE AVOIDANCE OF DOUBT, PURCHASE ORDERS IN EXCESS OF TWO MILLION DOLLARS (\$2,000,000) SHALL NOT BE INCLUDED FOR ANY REASON IN DETERMINING THE TWO MILLION DOLLAR (\$2,000,000) ANNUAL AGGREGATE TOTAL LIABILITY CAP SET OUT IN THE PRECEDING PARAGRAPH. CALENDAR YEARS SHALL BE DETERMINED BEGINNING ON THE EFFECTIVE DATE OF THE AGREEMENT AND CONTINUE FROM YEAR TO YEAR THEREAFTER DURING THE TERM OF THE AGREEMENT.

## THE REMEDIES SET FORTH IN THIS AGREEMENT ARE EXCLUSIVE.

13.17 <u>Termination for Convenience</u>. Agency may cancel this Agreement at any time and without cause upon ten (10) days prior written notice to Contractor . In the event of such termination, Contractor shall be entitled for reimbursement according to Exhibit B hereof for the Work performed prior to the notice of termination, plus Contractors 's actual, direct, and unavoidable costs resulting from the termination which in no event to exceed the

amount of the Purchase Order and shall not include any overhead, indirect costs, profit, or damages. Contractor shall to the fullest commercially reasonable extent possible mitigate any such costs.

## 13.18 Force Majeure

- **13.18.1** If a Force Majeure Event prevents either Party from performing any obligation under this Agreement, that inability to perform will not constitute breach, and the schedule for performance will be extended, if the Party asserting the Force Majeure Event ("Asserting Party") (1) uses reasonable efforts to perform its obligations, and (2) complies with its obligations under Section 13.18.3.
- 13.18.2 For purposes of this agreement, "Force Majeure Event" means, with respect to the Asserting Party, any event or circumstance that (1) was not caused by the Asserting Party, (2) could not have been reasonably foreseen by the Asserting Party, and (3) is beyond the Asserting Party's reasonable control. A Force Majeure Event may include, but is not limited to, a war, riots, fire, flood, strikes or labor difficulty, governmental acts such as but not limited to trade restrictions, including embargoes and refusal of permissions, acts of God, acts of the other Party, wrecks or delays in transportation, epidemics, or unusual inability to obtain necessary labor or materials from usual sources.
- **13.18.3** If a Force Majeure Event occurs, the Asserting Party shall promptly, after it becomes aware of the occurrence of the event, and in any event no more than five (5) days after the Asserting Party becomes aware of such occurrence, notify the other Party of the occurrence of that Force Majeure Event, its effect on performance, and how long the Asserting Party expects it to last. Thereafter the Asserting Party shall update that information as reasonably necessary. During a Force Majeure Event, the Asserting Party shall use reasonable efforts to resume its performance under this Agreement.

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

[Remainder of page intentionally left blank]

# NORTHERN CALIFORNIA POWER AGENCY

SULZER TURBO SERVICES HOUSTON, INC.

\_\_\_\_\_

Date\_\_\_\_\_

Date

RANDY S. HOWARD, General Manager

Attest:

ALLEN THORNTON, VP Sales, North America

Assistant Secretary of the Commission Approved as to Form:

Assistant General Counsel

# EXHIBIT A

# SCOPE OF WORK

Sulzer Turbo Services Houston, Inc., ("Contractor") shall provide inspection and maintenance services as requested by the Northern California Power Agency ("Agency").

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

- Compressor inspections
- Combustion inspections (CI)
- Hot gas path inspection (HGP)
- Steam Turbines inspections
- Major turbine inspections
- Process pumps and compressors
- Turbine overhaul and valve maintenance
- Field machining and Millwright services
- Propose resource requirements for maintenance outages
- Crane support and operation
- Project management, turbine tooling kits, and transportation of all equipment
- Provide engineering and senior technical advisors and support packages as required.

At the request of Agency, Contractor shall also supply spare parts within agreed upon timeframe based upon approved detailed list of items on Purchase Order(s).

# EXHIBIT B

# COMPENSATION SCHEDULE AND HOURLY FEES

Compensation for all work, whether on a fixed price or time and materials basis, including hourly fees and expenses, shall not exceed amount as set forth in Section 2 of this Agreement. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

Delivery of Goods under this Agreement shall, unless otherwise agreed to in writing by the Parties for a particular Purchase Order, shall be FCA, Contractor's facility (INCOTERMS 2010).

Classification	Straight	Overtime		Pı	emium Time	
	Time					
Millwright Journeyman	\$78.00	\$117.00			\$156.00	
Millwright Apprentice	\$65.00	\$97.50			\$130.00	
Technician, Safety Personnel, Scheduler	\$114.00	\$159.60			\$205.20	
Supervisor, Foreman	\$118.80	\$178.20			\$237.60	
Technical Director	Technical Director \$150.00 \$210.00					
Project Manager	Project Manager \$174.00 \$234.00					
Senior Tech Services Engineer	\$216.00	\$324.00		\$432.00		
Technical Services Engineer	\$180.00	\$270.00			\$360.00	
Site Administration	\$58.80	\$88.20	\$117.60			
	Field Equ	uipment				
Vibration Analysis Instrumentation		\$450.00		Shift		
Laser Alignment, Tracking Instrument	\$350.00		Shift			
Video-Scope	\$750.00		Shift			
Hydraulic Wrench (Rented units will t	\$350.00		Shift			
Mobile Tool Unit (plus delivery charg	\$600.00		Shift			
Crew Truck (plus mileage) (Rented un	its will be billed	per section 7)	\$10.00 Per Hour			

2015 Field Service Rate \$/per hour

Domestic rates for Machinery Diagnostic Services Rendered from Sulzer RES La Porte Effective January 1, 2015 through December 31, 2015.

Classification	Straight Time	Overtime	Premium Time		
	Monday-Friday (non holidays)	Saturdays, daily other than normal,	Sundays, national holidays,		
	for first 8 hours	but less than 12 consecutive hours	or after 12 consecutive hours		
Machinery Diagnostics Engineer	\$180 /hr	\$270 /hr	\$360 /hr		
Data Collection	\$150 /hr	\$225 /hr	\$300 /hr		
Video Scope Inspection	\$150 /hr	\$225 /hr	\$300 /hr		

For work above the Arctic Circle, offshore or hazardous environments: 1.2 multiplier

## Equipment Rates

Laser Alignment & Tracking	\$375 /shift
Vibration Analysis & Data Acquisition (ADRE 408)	\$660 /shift
Video Scope Equipment	\$375 / shift

NOTES:

- Minimum billing for field services will be 8 hours or as originally quoted.
- Overtime is in effect outside normal 8 hour workday Monday Friday.
- Premium time is in effect beyond 12 hours daily, Sundays, Union holidays and nationally recognized holidays. Sulzer recognizes the following holidays: New Years, Good Friday, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve and Christmas Day.
- Minimum billing for generating Vibration Analysis report (on or offsite) is 10 hours.
- All materials, consumables, rental equipment, freight, and sub-contract services supplied in connection with Field Service will be invoices at cost + 20%. Crane rental will be charged at cost plus 25%.
- Cost associated with mobilization and demobilization of field crews and tooling are charged at cost plus 10%.
- Rates are updated annually upon 30 days' prior written notice to NCPA.

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

## SULZER TURBO SERVICES HOUSTON, INC.

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 \_\_\_\_\_\_, 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.

2365685.7



## Lodi Energy Center Project Participant Committee

# Staff Report

AGENDA ITEM NO.: 12

Date:	April 8, 2015
To:	Lodi Energy Center Project Participant Committee
Subject:	OSIsoft Enterprise Program Agreement for Plant Information (PI) Software – All NCPA Facility Locations

## <u>Proposal</u>

Approve a five year Enterprise Program Agreement with OSIsoft, LLC for an amount not-toexceed \$447,500 for Plant Information (PI) software to standardize and improve plant data at all the NCPA plants including Geothermal, Hydroelectric, CT1, CT2 and LEC.

## **Background**

The PI is a software tool to standardize and improve plant data acquisition for business, operation and maintenance use. This gives NCPA the ability to tie "Islands of Information" together (process data, performance data, emissions data (CEMS), plant equipment data, vibration data, etc.) and optimize plant operations from historical analysis and key performance indicators. This reduces heat rates through instantaneous monitoring and benchmarking, increases equipment reliability through proper maintenance such as condition-based-maintenance (CBM) analysis, and gives staff the required tools at their desktops for accurate economic analysis to reduce overall agency cost. The PI system is used as a data historian for Geothermal, Hydroelectric, CT1, CT2, LEC and Roseville dispatch and is integral to operations, maintenance, engineering, power management and the overall optimization of NCPA general resources.

In 2010, the Commission approved a \$260,000 agreement (SR: 111:10) for the installation of PI and training of NCPA personnel. As well, in 2010, a \$485,000 agreement (SR: 112:10) was approved for the cost of the Enterprise Program for a five-year period. The current agreement expired on March 17, 2015.

## Selection Process

This Enterprise Program Agreement provides for the payment of the annual Enterprise Services Fee for licensing the OSIsoft PI software. No bidding or selection process is associated with this agreement.

## Fiscal Impact

Total cost of the Enterprise Program Agreement is \$447,500 over five years. Only the necessary purchase orders will be issued for each plant and for each phase of work.

## Environmental Analysis

OSIsoft Enterprise Program Agreement for PI April 8, 2015 Page Two

Work associated with this agreement would be eligible for a Class One Exemption under the California Environmental Quality Act (CEQA) Guidelines 15301 (b) and therefore categorically exempt from CEQA. Class one is the "existing facility" exemption.

Committee Review

The recommendation below was reviewed by the Facilities Committee on April 1, 2015 and was recommended for Commission approval.

### **Recommendation**

Staff recommends that the PPC pass a motion approving the Enterprise Program Agreement with OSIsoft, LLC for the PI software Enterprise Program, with any non-substantial changes recommended and approved by the NCPA General Counsel, for the amount of not-to-exceed \$447,500 over five years.

Prepared by:

/s/

KEN SPEER Assistant General Manager Generation Services

Attachment: (1) OSIsoft Enterprise Program Agreement



651 Commerce Drive Roseville, CA 95678

phone (916) 781-3636 fax (916) 783-7693 web www.ncpa.com

# Lodi Energy Center Project Participant Committee

# **Staff Report**

AGENDA ITEM NO.: 13

Date:	April 6, 2015
То:	Lodi Energy Center Project Participant Committee
Subject:	Approval of updated Exhibit 8 of PMOA Agreement Schedule 1.00

## **Background**

NCPA and the LEC Project Participants executed the Lodi Energy Center Project Management and Operations Agreement (PMOA), which became effective on August 1, 2010. The PMOA contains multiple Schedules, which provide procedures and protocols, and guidelines regarding Project operations. Pursuant to the PMOA, Schedules can be revised, deleted or added from time to time based on then existing operating or market conditions, and subject to the approval of the Project Participant Committee (PPC), and with regard to certain Schedules, approval additionally by the NCPA Commission when such Schedules "...could be reasonably viewed as having an impact on other NCPA projects." (PMOA, Article 10).

Staff is recommending changes to Exhibit 8 of PMOA Agreement Schedule 1.00, which identifies CAISO settlement charge codes that are applicable to the LEC Project and their respective allocation basis to Project Participants. A completed "marked" version of the proposed Exhibit 8 is attached to this staff report reflecting the specific changes staff is recommending.

These changes to Exhibit 8 are necessary to reflect the addition of a settlement charge code for the disposition of proceeds associated with the CAISO's Generator Interconnection Process. As described in Exhibit 8 and consistent with the methodology prescribed in CAISO Tariff section 37.9.4, such amounts are to be distributed to LEC Project Participants in proportion to Grid Management Charge (GMC) amounts collected during the applicable defined calendar year.

## Fiscal Impact

No significant costs will be incurred to implement the changes to the PMOA Schedules and funds are available in the NCPA budget to support the work associated with these contract updates.

## 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.

Approval of Updated Exhibit 8 of PMOA Schedule 1.00 April 6, 2015 Page 2

## **Recommendation**

NCPA staff recommends that the PPC pass a motion approving changes to Exhibit 8 of PMOA Schedule 1.00 as attached to this staff report and described herein.

Respectfully submitted,

Prepared by:

/s/

/s/

DONNA STEVENER Assistant General Manager/CFO ROBERT CARACRISTI Manager, Information Services and Power Settlements

Attachments – Marked up copy of Exhibit 8 of PMOA Agreement Schedule 1.00

## EXHIBIT 8

## Settlement of CAISO Charge Codes and Allocations to Participants

The Project will utilize NCPA's current CAISO SCID. The CAISO Settlement Charges shall be determined by the CAISO Tariff and is typically available on the CAISO's website as "ISO Market Charge Codes Matrix" that the CAISO updates periodically. Below is a subset of CAISO Market Charge Codes that apply to the Project.

Charge Code	Charge Code Name	Short Description	Allocation Basis
4512	GMC Inter- Scheduling Coordinator Trade Transaction Fee	Accounts for Inter-SC Trade (IST) Schedules in both the Day Ahead and Real Time Markets.	Allocated to the Project Participant/s who initiated the Trade based on unique scheduling SC IST name
4515	GMC Bid Transaction Fee	Accounts for the CAISO fee per bid segment for each Resource's final Clean Bids, Self Schedules, and Self Provisions.	Generation Entitlement Share
4560	GMC Market Services Charge	Designed to recover costs the CAISO incurs for implementing and running the Markets.	Generation Entitlement Share
4561	GMC System Operations Charge	Designed to recover costs the CAISO incurs for running the Grid in Real Time.	Generation Entitlement Share
6124	No Pay Spinning Reserve Settlement	Rescinds payments for Day Ahead, HASP, and Real Time Spinning Reserve Awards in the event the Resource does not fulfill the requirements associated with that payment.	Generation Entitlement Share
6486	Real Time Excess Cost for Instructed Energy Allocation	Allocates the excess cost payments to Scheduling Coordinators.	Generation Entitlement Share
6524	No Pay Regulation Up Settlement	Rescinds payments for Day Ahead, HASP, and Real Time Regulation Up Awards in the event the Resource does not fulfill the requirements associated with that payment.	Generation Entitlement Share
6624	No Pay Regulation Down Settlement	Rescinds payments for Day Ahead, HASP, and Real Time Regulation Down Awards in the event the Resource does not fulfill the requirements associated with that payment.	Generation Entitlement Share

Exhibit 8 to Agreement Schedule 1.00

LEC Project Management and Operations Agreement

Proposed Effective 3-24-20144-123-2015

Charge Code	Charge Code Name	Short Description	Allocation Basis
7056	Daily Flexible Ramp Cost Allocation	Accounts for the costs associated with the payments to Resources that resolve the flexible ramping constraint.	Generation Entitlement Share
7058	Monthly Flexible Ramp Cost Allocation	Reallocates the monthly total flexible ramp supply costs reversed in charge code 7057 to suppliers based upon monthly gross negative supply deviations.	Generation Entitlement Share
7999	Invoice Deviation Interest Allocation	Accounts for interest charges to Scheduling Coordinators for time value of money between CAISO Invoices.	ESP Invoice Deviation Amount deltas
8824	Monthly Resource Adequacy Standard Capacity Product Non- Availability Charge	Accounts for the CAISO's non availability charges to any Resource Adequacy Resource which fails to meet the CAISO-defined Availability Standard.	Pro-rata assessment to LEC Participants who claim LEC for RA Capacity for applicable month

# LEC ISO Net Energy Sales Charge Codes

Charge Code	Charge Code Name	Short Description	Allocation Basis
6011	Day Ahead Energy, Congestion, and Losses Settlement	Settles Day Ahead Schedules by paying for Supply and charging for Demand based upon the LMP at Resource Locations for each hour.	Generation Entitlement Share
6100	Day Ahead Spinning Reserve Capacity Settlement	Pays Scheduling Coordinators for awarded Spinning Reserve in the Day Ahead Market.	Generation Entitlement Share
6170	Real Time Spinning Reserve Capacity Settlement	Pays Scheduling Coordinators for awarded Spinning Reserve in the Real Time Market.	Generation Entitlement Share
6301	Day Ahead Inter-SC Trades Settlement Physical and Converted Physical Trades	Accounts for Energy Trades between Scheduling Coordinators in the Day Ahead Market. The "From" SC is charged the product of the valid quantity and the LMP.	Allocated to the Project Participant/s who initiated the Trade based on unique scheduling SC IST
		The "To" SC is paid the product of the valid quantity and the LMP.	name
		This could be a cost or revenue.	

Exhibit 8 to Agreement Schedule 1.00 LEC Project Management and Operations Agreement <u>Proposed</u> Effective <u>3-24-20144-123-2015</u>

Charge Code	Charge Code Name	Allocation Basis				
6371	FMM Inter-SC Trades Settlements	37				
		The "From" SC is charged the product of the valid quantity and the LMP.	based on unique scheduling SC IST			
		The "To" SC is paid the product of the valid quantity and the LMP.	name			
		This could be a cost or revenue.				
6460	FMM IIE	FMM Instructed Imbalance Energy is the incremental or decremental energy to the Day Ahead Schedule.	Generation Entitlement Share			
		This could be a cost or revenue.				
6470	RTD IIE	Based upon the calculated energy expected to be produced or consumed as a result of responding to Real Time Dispatch Instructions.	Generation Entitlement Share			
		This could be a cost or revenue.				
6475	Real Time Uninstructed Imbalance Energy	Accounts for deviations from a Resource's Instructed Imbalance Energy and Day Ahead Schedule.	Generation Entitlement Share			
		This could be a cost or revenue.				
6488	Exceptional Dispatch Uplift Settlement	Accounts for the Excess Cost Payment (Uplift) above the RT LMP to a Resource's Bid Price for exceptional dispatches that are used to mitigate or resolve congestion as a result of transmission-related modeling limitations in the Full Network Model.	Generation Entitlement Share			
6500	Day Ahead Regulation Up Capacity Settlement	Pays Scheduling Coordinators for awarded Regulation Up in the Day Ahead Market.	Generation Entitlement Share			
6570	Real Time Regulation Up Capacity Settlement	Pays Scheduling Coordinators for awarded Regulation Up in the Real Time Market.	Generation Entitlement Share			
6600	Day Ahead Regulation Down Capacity Settlement	Pays Scheduling Coordinators for awarded Regulation Down in the Day Ahead Market.	Generation Entitlement Share			
6620	Real Time Bid Cost Recovery Settlement	Generation Entitlement Share				

Exhibit 8 to Agreement Schedule 1.00 LEC Project Management and Operations Agreement <u>Proposed</u> Effective <u>3-24-20144-123-2015</u>

Charge Code	Charge Code Name	Short Description	Allocation Basis		
6630	Day Ahead Bid Cost Recovery	Pays Scheduling Coordinators an uplift to ensure start up costs, bid costs, and minimum load costs are able to be recovered related to Day Ahead Market.	Generation Entitlement Share		
6670	Real Time Regulation Down Capacity Settlement	Pays Scheduling Coordinators for awarded Regulation Down in the Real Time Market.	Generation Entitlement Share		
7050	Flexible Ramp Up Capacity Payment	Provides a payment to Resources that resolve the flexible ramping constraint and have been awarded Flexible Ramping Capacity.	Generation Entitlement Share		
7057	Monthly Flex Ramp Up Supply Cost Allocation Reversal	Sums the daily Flexible Ramp Supply Costs in charge code 7056 to a monthly total and reverses them. They are then reallocated in charge code 7058.	Generation Entitlement Share		
7251	Regulation Up Mileage Settlement	Settles the quantity of frequency Regulation Up service provided by a Resource when accurately following a control signal from the CAISO.	Generation Entitlement Share		
7261	Regulation Down Mileage Settlement	Settles the quantity of frequency Regulation Down service provided by a Resource when accurately following a control signal from the CAISO.	Generation Entitlement Share		
7989	Invoice Deviation Interest Settlement	Accounts for interest payments to Scheduling Coordinators.	ESP Invoice Deviation Amount		
<u>8526</u>	Generator Interconnection Process (GIP) Forfeited Deposit Allocation	This charge code is associated with the forfeited deposit amounts collected by the CAISO thoughout the various stages of the GIP, which are then allocated to Scheduling Coordinators in proportion to their respective share of assessed Grid Management Charges (GMC) during the defined calendar year, consistent with CAISO Tariff section 37.9.4.	For the applicable defined calendar year, an LEC Participant's allocated CC 8526 amount is its ratio of assessed GMC amounts attributable to the Project and the total GMC amounts assessed to NCPA.		
8820	Monthly Resource Adequacy Standard Capacity Product Non- Availability Allocation	Accounts for the CAISO's allocation of non availability charges collected from Resource Adequacy Resources which fail to meet the CAISO-defined Availability Standard.	Pro-rata assessment to LEC Participants who claim LEC for RA Capacity for applicable month		

Exhibit 8 to Agreement Schedule 1.00 LEC Project Management and Operations Agreement <u>Proposed</u> Effective <u>3-24-20144-123-2015</u>



## Lodi Energy Center Project Participant Committee

# Staff Report

AGENDA ITEM NO.: 14

**Date:** April 8, 2015

To: Lodi Energy Center Project Participant Committee

Subject: Approval of Lodi Energy Center FY2016 Annual Budget

#### Proposal

Approve and adopt the Lodi Energy Center FY2016 Annual Budget in the amount of \$97,260,649.

#### Background

In October 2014, the Commission approved budget guidance for the NCPA FY2016 Annual Budget and staff began preparation of the proposed budget during the following months. From February through April 13, 2015 various presentations on the budget were made as follows:

- Facilities Committee (February 23 and March 23)
- Utility Directors (March 20 retreat)
- Lodi Energy Center Project Participants Committee (February 9, March 9, April 13)

All changes resulting from the budget review meetings have been incorporated in the proposed Lodi Energy Center FY2016 Annual Budget.

#### Fiscal Impact

The Lodi Energy Center Annual Budget cost for FY2016 is approximately \$97.2 million, which represents an increase of about \$6.3 million from the prior year's budget. Third Party Revenue forecast for FY2016 is approximately \$68.9 million, which is about \$13.0 million more than the prior year's amount.

The forecast Net Annual Budget Cost to Participants is about \$28.3 million which is about \$6.6 million less than the prior year's budget. Funding allocations for each member are attached to this staff report and is shown on page H-1 of the budget.

#### 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

#### Recommendation

NCPA staff recommends that the PPC pass a motion approving the Lodi Energy Center FY2016 Annual Budget in the amount of \$97,260,649. LEC Final Budget FY2016 April 8, 2015 Page Two

Prepared by:

 $\langle \overline{} \rangle$ 0 0

Lorr Assistant General Manager/CFO Administrative Services/Finance

Attachments: (# 1)

Allocation of LEC Project Budget

#### LODI ENERGY CENTER Allocation of Project Budget FY 2016

ALLOCATION PERCENTAGES:	Allocated by	de ta	Total	Azusa	BART	Biggs	CDWR	Gridley H	ealdsburg	Lodi	Lompoc	MID PIL	imas-Sierra	PWRPA	SVP.	Ukian
Generation Entitlement Share (9)	GES		100.0000%	2.7857%	6.6000%	0,2679%	33.5000%	1.9643%	1.6428%	9.5000%	2.0357%	10.7143%	0.7857%	2.6679%	25.7500%	1.7857%
Indenture Cost Share A	ICS A		100.0000%	4.9936%	11.8310%	0.4802%	0.0000%	3.5212%	2,9448%	17.0295%	3.6491%	0.0000%	1.4084%	4,7824%	46,1588%	3.2010%
Indenture Cost Share B	ICS B		100.0000%	0.000%	0.000%	0.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
PROJECTED MWH			1,605,494	44,724	105,963	4,301	537,840	31,537	26,375	152,522	32,683	172,017	12,614	42,833	413,415	28,670
PROJECT COSTS:					•						•			•		20,010
Fuel Cost Labor	GES GES	S	49,851,536 S	1,388,714 \$	3,290,201 \$	133,552 \$	16,700,265 S	979,234 S	818,961 S	4,735,896 \$	1,014,828 \$	5,341,243 S	391,684 S	1,329,989 \$	12,836,771 \$	890,199
Variable O&M	GES	\$ 5	4,381,034 \$ 4,844,523 \$	122,042 \$ 134,954 \$	289,148 \$ 319,739 \$	11,737 \$ 12.978 \$	1,467,646 \$ 1.622,915 \$	86,057 \$	71,972 S	416,198 S	89,185 \$	469,397 S	34,422 \$	116,882 \$	1,128,116 \$	78,232
Fixed O&M	GES	s	1,780,003 S	49.586 S	117,480 \$	4,769 \$	1,622,915 \$ 596,301 \$	95,161 \$ 34,965 \$	79,586 \$ 29,242 \$	460,230 S 169,100 S	98,620 \$ 36,236 \$	519,057 \$ 190,715 \$	38,063 \$	129,247 \$	1,247,465 \$	86,509
O&M Administration	GES	\$	1,316,163 S	36,664 S	86,867 \$	3,526 \$	440,915 \$	25,853 \$	21,622 \$	125.035 S	26,793 S	141,018 \$	13,985 \$ 10,341 \$	47,489 S 35.114 S	458,351 \$ 338,912 \$	31,786 23,503
Mandatory Costs	GES	\$	235,000 S	6,546 S	15,510 S	630 S	78,725 \$	4,616 \$	3,861 \$	22,325 S	4.784 S	25,179 S	1,846 \$	6.270 S	60,513 S	23,503 4,196
Inventory Stock	GES	s	400,000 S	11,143 S	26,400 \$	1,072 \$	134,000 S	7,857 \$	6,571 S	38,000 \$	8,143 S	42,857 S	3,143 \$	10,672 S	103,000 \$	7,143
O&M and Capital Projects Costs Other Costs	GES	S	2,954,589 \$	82,306 \$	195,003 5	7,915 S	989,787 S	58,037 S	48,538 S	280,686 S	60,147 \$	316,564 S	23,214 \$	78,825 S	760,807 S	52,760
Transmission (CAISO)	GES	s s	1,222,925 \$ 657,289 \$	34,067 S 18,166 S	80,713 \$ 43,040 \$	3,276 S	409,680 \$	24,022 \$	20,090 \$	116,178 \$	24,895 S	131,028 \$	9,609 S	32,626 S	314,903 S	21,838
Debt Service Cost:		•		-			218,46D \$	12,810 \$	10,713 S	61,951 S	13,275 \$	69,870 \$	5,124 \$	22,566 S	167,922 \$	11,645
Indenture Group A Cost BAB's Subsidy (Group A)	ICS A ICS A	5 5	21,235,512 \$ (4,194,160) \$	1,060,417 5	2,512,373 \$	101,973 \$	- S	747,745 \$	625,343 \$	3,616,302 \$	774,905 \$	- 5	299,081 S	1,015,567 S	9,802,058 S	679,749
Debt and Trustee Fees (Group A)	ICS A	s	(4,194,160) S 27,715 S	(209,440) \$ 1,384 \$	(496,211) S 3,279 S	(20,140) \$ 133 \$	- S	(147,685) S 976 S	(123,510) \$ 816 \$	(714,244) S 4,720 S	(153,049) \$	- \$	(59,071) \$	(200,582) S	(1,935,974) \$	(134,255)
Indenture Group B Cost	ICS B	s	11,415,034 S	- \$	- 5	· - \$		- S	د 160 - S	4,720 S	1,011 S - S	- S	390 Ş - S	1.325 S	12,793 \$	887
BAB's Subsidy (Group B)	ICS B	s	(2,015,392) \$	- S	- 5	- ·S	(2,015,392) \$	- S	- \$	- 5	- 3	- 5	- S	- 5	- s - s	-
Debt and Trustee Fees (Group B)	ICS B	5	14,827 S	- \$	- \$	- \$	14,827 S	- \$	- S	- \$	- S	- 5	- S	- 5	- 5	-
Administrative & General	GES	S	1,905,508 \$	53,082 \$	125,764 \$	5,105 S	. 638,345 \$	37,430 S	31,304 S	181,023 S	38,790 S	204,162 \$	14,972 S	50,837 S	490,668 S	34,027
Power Management Allocated Costs Total Project Costs	GES	\$	1,228,543 S 97,260,649 \$	34,224 \$ 2,823,855 \$	81,084 S	3,291 S	411,562 \$	24,132 \$	20,183 \$	116,712 S	25,009 \$	131,630 \$	9,653 S	32,776 \$	316,350 S	21,938
Estimated price per MWh			60,58 \$	63.14 \$	63,14 \$	271,564 \$ 63.14 \$	33,123,070 \$ 61,59 \$	1.991,210 S 63,14 \$	1,665,291 \$ 63,14 \$	9,630,111 \$	2,063,572 \$	7,582,718 \$	798,456 \$	2,709,604 \$	26,102,653 \$	
Third Party Revenue		•		00.14	03.14 9	. 03.14 3	01,03 3	0J.14 J	03,14 3	63.14 \$	63.14 \$	44.08 \$	63.14 \$	63.26 \$	63.14 S	63.14
ISO Energy Sales	GES	\$	67,279,734 \$	1.874.212 S	1 1 10 100 0											
Ancillary Services Sales	665	s	1,616,222 \$	45,023 S	4,440,452 \$ 106,671 \$	180,242 \$ 4,330 \$	22,538,711 \$ 541,434 5	1,321,576 S 31,747 S	1.105,271 \$ 26,551 \$	6,391,575 S 153,541 S	1,369,614 \$	7,208,553 S	528,617 S	1,794,956 \$	17,324,532 \$	1,201,414
Interest Income	GES	ŝ	5.950 S	166 5	393 \$	-16 \$	1,993 \$	31,747 S	20,001 S 98 S	153,541 S 565 S	32,901 \$ 121 \$	173,167 \$	12,699 \$	43,119 S	416,178 5	28,861
Interest Income (Group A)	ICS A	š	32.667 S	1.631 \$	3,865 \$	157 \$	· - \$	1.150 \$	962 S	5,563 S	121 S 1,192 S	638 S - S	47 \$ 460 S	159 S	1,532 S	106
Interest Income (Group B)	ICS B	s	5,872 S	- \$	- S	· - S	5,872 \$	- \$	- \$	- S	- 5		460 S	1,562 S	15,079 S	1,046
		5	68,940,445 S	1,921,032 \$	4,551,391 \$	184,745 \$	23,088,010 \$	1,354,590 S	1,132,882 S	6,551,244 S	1,403,828 \$	7,382,357 S	541,823 S	1,839,796 \$	17,757,320 \$	1,231,427
Annual Project Costs, net Estimated price per Mwb, net		<u>s</u>	28,320,204 \$	902,823 \$	2,138,999 \$	86,818 \$	10,035,060 \$	636,620 \$	532,409 \$	3,078,867 \$	659,744 \$	200,361 \$	254,633 \$	869,808 \$	8,345,333 \$	578,728
csumated price per wwn, net		\$	17.64 \$	20.19 \$	20.19 \$	20,19 \$	18.66 \$	20.19 \$	20.19 \$	20.19 S	20.19 \$	1.16 \$	20,19 \$	20.31 \$	20.19 \$	20,19
JPA Assessment (per PMOA)		s	<u>97,806</u> \$	5,486 S	S	- \$	65,967 \$	- \$	- \$	- s	- s	21,099 S	- S	5,254 S	- S	_
				-											<b>`</b>	
Summary of Variable and Fixed Project Co Variable Costs	osts:	s	65 959 949 <b>*</b>													
Fixed Costs		\$ 5	55,353,348 \$ 41,907,301 \$	1,541,834 \$ 1,282.021 \$	3,652,980 \$ 3,037,410 \$	148,278 \$ 123,286 \$	18,541,640 \$ 14,581,430 \$	1,087,205 \$ 904,005 \$	909,260 \$	5,258,077 \$	1,126,723 \$	5,930,170 \$	434,871 \$	1,481,802 \$	14,252,157 \$	988,353
		\$	97,260,649 \$						756,031 \$	4,372,034 \$ 9,630,111 \$	936,849 \$ 2,063,572 \$	1,652,548 \$	361,585 \$	1,227,802 \$	11,850,496 \$ 26,102,653 \$	
											2,000,012 3	1,002,110 \$	190,400 \$	2,709,004 \$	20,102,003 \$	1,810,156
FY 2015 Approved Budget (For Compariso	on Putpose):	•													•	
Net Annual Project Costs		5	34,895,832 \$	1,085,948 \$	2,572,868 \$	104,430 \$	12,239,233 \$	765,747 \$	<u>640,402</u> \$	3,703,376 \$	793,565 \$	904,594 \$	306,284 \$	1,045,189 \$	10,038,079 \$	696,116
Project Costs (Decrease)		5	(6,575,628) \$ -18,84%	(183,125) \$	(433,869) \$ -16,86%	(17,511) \$	(2,204,173) \$	(129,127) \$	(107,993) \$	[624,509] \$ -16,86%	(133,821) \$	(704,232) \$	(51,651) \$	(175,382) \$	(1,692,746) \$	
											-16,86%	-77.85%	-16.86%	-16,78%	-16.86%	-16.86%
Note: 1	Generation	Entitleme	ent Share (GES) is s	ysnonomus with co	ommonly used term	is of Project Entli	ement Share, Projec	t Percentage, Pro	ject Share, Third	Phase share.						
O&M Reserve Fund Calculation:												· · · ·				]
Total O&M Costs		s	68,236,806							· ·						
Estimated Requirement	/365*6	50 	11,217,009	312,472	740,323	30,050	3,757,699	220,336	184,273	1,065,616	228,345	1,201,824	88,132	299,259	2,888,380	200,302
O&M Reserve balance as of M	arch 2015		10,649,339	296,659	702,856	28,530	3,567,528	209,185	174,947	1,011,687	216,789	1 141 000	. 02 072			400.45-
Additional Reserve Requireme		\$	567,670 \$	15,813 \$	37,467 \$	1,520 \$	190,171 \$	11,151 \$	9,326 \$	53,929 \$	11,556 \$	1,141,002 60,822 \$	83,672 4,460 \$	284,114 15,145 \$.	2,742,205	190,165
1		<u> </u>				.,			0,01,0 4		11,000 \$	00,022 \$	4,400 \$	10,140 \$.	140,173 \$	10,137

÷

Additional Reserve Requirement will be billed to participants in the July 2015 All Resources Bill.

E and the state of the state of

.



# NORTHERN CALIFORNIA POWER AGENCY

# **Section H**

Lodi Energy Center Annual Operating Budget

$\triangleright$	Allocation of Project Budget	H - 1
≻	Cost Summary	H - 3
≻	O&M and Capital Projects	H - 8
≻	Maintenance Reserves	H - 9
$\succ$	ISO Charges	H-10
$\succ$	Ancillary Services Revenue	H-13
$\succ$	Shared Facilities – Gas Plants	H-16
$\succ$	Generation Services	H-20
$\succ$	JPA Services	H-21
$\succ$	Org Chart	H-22
≻	Labor	H-23
$\succ$	Debt Service	H-24
≻	Average Electric & Gas Price Forecast	H-37
≻	Capacity Factor	H-38
	GHG Projection	H-39
$\succ$	Gas Offtake	H-40

#### LODI ENERGY CENTER Allocation of Project Budget FY 2016

LLOCATION PERCENTAGES:	Allocated by	Total	Azusa	BART	Biggs	CDWR	Gridley	lealdsburg	Lodi	Lompoc	MID Plu	imas-Sierra	PWRPA	SVP	Ukiah
eneration Entitlement Share (1)	GES	100.0000%	2.7857%	6,6000%	0.2679%	33.5000%	1.9643%	1.6428%	9,5000%	2.0357%	10,7143%	0.7857%	2.6679%	25,7500%	1.7857%
denture Cost Share A	ICS A	100.0000%	4.9936%	11.8310%	0.4802%	0.0000%	3.5212%	2.9448%	17,0295%	3.6491%	0.0000%	1.4084%	4.7824%	46.1588%	3.2010%
identure Cost Share B	ICS B	100.0000%	0.000%	0.000%	0.000%	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
ROJECTED MWH		1,605,494	44,724	105,963	4,301	537,840	31,537	26,375	152,522	32,683	172,017	12,614	42,833	413,415	28,670
ROJECT COSTS:													•		
uel Cost		\$ 49,851,536 \$	1,388,714 \$	3,290,201 \$	133,552 S	16,700,265 \$	979,234 \$	818,961 S	4,735,896 S	1,014,828 \$	5,341,243 \$	391,684 \$	1,329,989 \$	12,836,771 \$	890,199
abor ariable O&M		\$ 4,381,034 \$	122,042 \$	289,148 \$	11,737 S	1,467,646 \$	86,057 \$	71,972 \$	416,198 \$	89,185 \$	469,397 S	34,422 \$	116,882 S	1,128,116 \$	78,232
ked O&M		\$ 4,844,523 \$ \$ 1,780,003 \$	134,954 \$	319,739 \$	12,978 \$	1,622,915 \$	95,161 \$	79,586 \$	460,230 \$	98,620 \$	519,057 \$	38,063 \$	129,247 \$	1,247,465 \$	86,509
SM Administration		\$ 1,780,003 \$ \$ 1,316,163 \$	49,586 \$ 36,664 \$	117,480 \$ 86,867 \$	4,769 \$ 3,526 \$	596,301 \$ 440,915 \$	34,965 \$ 25,853 \$	29,242 \$	169,100 \$	36,236 \$	190,715 \$	13,985 \$	47,489 \$	458,351 \$	31,786
Indatory Costs		\$ 235,000 \$	5,546 S	15,510 \$	3,526 \$ 630 \$	440,915 S 78,725 S	25,853 \$ 4,616 \$	21,622 \$ 3,861 \$	125,035 \$ 22,325 \$	26,793 S 4,784 \$	141,018 \$ 25,179 \$	10,341 \$ 1.846 \$	35,114 \$	338,912 S 60.513 S	23,503
entory Stock		\$ 400,000 \$	11,143 \$	26,400 \$	1,072 \$	134.000 S	7,857 \$	6,571 \$	38,000 \$	8,143 \$	42,857 \$	1,846 \$ 3,143 \$	6,270 \$ 10,672 \$	60,513 \$ 103,000 \$	4,196 7,143
M and Capital Projects Costs		\$ 2,954,589 \$	82,306 \$	195,003 \$	7.915 \$	989.787 \$	58.037 \$	48,538 \$	280,686 \$	60.147 \$	316.564 \$	23.214 \$	78,825 \$	760,807 \$	52,760
ner Costs		\$ 1,222,925 \$	34,067 \$	80,713 \$	3,276 S	409,680 S	24,022 \$	20,090 \$	116,178 S	24,895 \$	131,028 \$	9,609 \$	32,626 \$	314,903 \$	21,838
nsmission (CAISO)		\$ 657,289 \$	18,166 S	43,040 \$	1,747 \$	218,460 \$	12,810 \$	10,713 \$	61,951 \$	13,275 \$	69,870 \$	5,124 \$	22,566 S	167,922 \$	11,645
bt Service Cost;						2.10,100 0		10,710 0	01,001 0	10,210	00,010 0	0,124	22,000 5	101,022	11,040
ndenture Group A Cost	ICS A	\$ 21,235,512 \$	1,060,417 \$	2,512,373 \$	101,973 \$	- \$	747,745 \$	625,343 \$	3,616,302 S	774,905 \$	- \$	299,081 \$	1,015,567 S	9,802,058 \$	679,749
AB's Subsidy (Group A)		\$ (4,194,160) \$	(209,440) \$	(496,211) \$	(20,140) \$	- 5	(147,685) S	(123,510) \$	(714,244) \$	(153,049) S	- \$	(59,071) \$	(200,582) \$	(1,935,974) \$	(134,255)
ebt and Trustee Fees (Group A)		\$ 27,715 \$	1,384 \$	3,279 \$	133 \$	- S	976 S	816 \$	4,720 \$	1.011 \$	- 5	390 S	1,325 \$	12,793 \$	887
Identure Group B Cost		\$ 11,415,034 \$	- 5	- S	- 5	11,415,034 \$	- S	- \$	- S	- S	- S	- \$	- \$	- \$	-
AB's Subsidy (Group B)		\$ (2,015,392) \$	- \$	- S	- 5	(2,015,392) \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
Pebt and Trustee Fees (Group B) ministrative & General		\$ 14,827 S \$ 1.905.508 S	- \$ 53.082 \$	- \$ 125.764 \$	- \$	14,827 S	- S	- S	- \$	- s	- \$	- 5	- \$	- \$	
wer Management Allocated Costs		\$ 1,228,543 \$	34,224 \$	81,084 \$	5,105 S 3.291 S	638,345 \$	37,430 \$	31,304 S	181,023 \$	38,790 \$	204,162 \$	14,972 \$	50,837 \$	490,668 \$	34,027
tal Project Costs	923	\$ 97,260,649 \$	2,823,855 \$	6,690,390 \$	3,291 \$	411,562 \$ 33,123,070 \$	24,132 \$ 1,991,210 \$	20,183 \$	116,712 \$ 9,630,111 \$	25,009 \$ 2,063,572 \$	131,630 \$ 7,582,718 \$	9,653 \$ 796,456 \$	32,776 \$	316,350 \$ 26,102,653 \$	21,938
timated price per MWh		\$ 60.58 \$	63.14 \$	63.14 \$	63.14 \$	61,59 \$	63.14 \$	63.14 \$	63,14 \$	63.14 \$	44.08 \$	63.14 \$	63,26 \$	63.14 \$	63,14
ird Party Revenue															
O Energy Sales	GES	\$ 67,279,734 \$	1,874,212 \$	4,440,462 S	180.242 \$	22,538,711 \$	1.321.576 S	1.105.271 S	6,391,575 \$	1,369,614 \$	3 000 550 0	500.047			
cillary Services Sales		\$ 1,616,222 \$	45,023 \$	106,671 \$	4,330 \$	541,434 \$	31,747 \$	26,551 \$	153,541 \$		7,208,553 \$ 173,167 \$	528,617 S	1,794,956 \$	17,324,532 \$	1,201,414
erest Income		\$ 5,950 \$	166 \$	393 \$	4,550 \$	1,993 \$	117 S	20,331 J 98 S	565 \$	32,901 \$ 121 \$	173,167 \$ 638 \$	12,699 S 47 S	43,119 S 159 S	416,178 \$ 1.532 \$	28,861 106
erest Income (Group A)		\$ 32,667 \$	1,631 \$	3,865 \$	157 \$	1,553 S	1,150 \$	962 \$	5,563 \$	1.192 \$	- 5	47 S 460 S	1.562 \$	1,532 \$ 15,079 \$	1.046
rest Income (Group B)		\$ 5,872 \$	- S	- S	- 5	5,872 \$	- 5	- \$	- \$	- \$	- 3	- 5	- 5	- 5	1,040
		\$ 68,940,445 S	1,921,032 \$	4,551,391 \$	184,745 \$	23,088,010 \$	1,354,590 S	1,132,882 \$	6,551,244 \$	1,403,828 \$	7,382,357 \$	541,823 \$	1,839,796 \$	17,757,320 S	1,231,427
nual Project Costs, net		\$ 28,320,204 \$	902,823 \$	2,138,999 \$	86,818 \$	10,035,060 \$	636,620 \$	532,409 \$	3,078,867 \$	659,744 <b>\$</b>	200,361 \$	254,633 \$	869,808 \$	8,345,333 \$	578,728
timated price per Mwh, net		\$ 17.64 \$	20.19 \$	20.19 \$	20.19 \$	18.66 \$	20.19 \$	20.19 \$	20.19 <b>\$</b>	20.19 <b>\$</b>	1.16 \$	20.19 \$	20.31 \$	20.19 \$	20.19
A Assessment (per PMOA)		\$ 97,806 \$	5,486 \$	- \$	- S	65,967 \$	- 5	\$	- 5	<u> s</u>	21,099 \$	- \$	5,254 \$	- \$	-
Immary of Variable and Fixed Project Costs: Iriable Costs		\$ 55,353,348 \$	1,541,834 \$	3,652,980 \$	148,278 \$	18.541.640 \$	1.087.205 \$	909.260 \$	5,258,077 \$	1.126.723 \$	5.930.170 \$	434.871 S			988.353
xed Costs		\$ 41,907,301 \$	1,282,021 \$	3,037,410 \$	123,286 \$	14,581,430 \$	904,005 \$	756,031 \$	4,372,034 \$	936,849 \$	1,652,548 \$	361,585 \$	1,481,802 \$ 1,227,802 \$	14,252,157 \$ 11,850,496 \$	821,803
	•	\$ 97,260,649 \$	2,823,855 \$					1,665,291 \$				796,456 \$	2,709,604 \$		
	:												-11001001 4		1010[100
2015 Approved Budget (For Comparison Pu	urpose):														
t Annual Project Costs		\$ 34,895,832 \$	1,085,948 \$	2,572,868 \$	104,430 \$	12,239,233 \$	765,747 \$	640,402 <b>\$</b>	3,703,376 \$	793,565 \$	904,594 \$	306,284 \$	1,045,189 \$	10,038,079 \$	696,116
oject Costs (Decrease)		\$ (6,575,628) \$	(183,125) \$	(433,869) \$	(17,611) <b>\$</b>	(2,204,173) \$	(129,127) \$	(107,993) \$	(624,509) \$	(133,821) <b>S</b>	(704,232) \$	(51,651) \$	(175,382) \$	(1,692,746) \$	
	•	-18.84%	-16.86%	-16.86%	-16.86%	-18.01%	-16.86%	-16.86%	-16.86%	-16.86%	-77.85%	-16.86%	-16.78%	-16.86%	-16.86%
lote: 1	Generation E	ntitlement Share (GES) is s	sysnonomus with co	ommonly used term	s of Project Entit	lement Share, Projec	t Percentage, Pro	ect Share, Third F							
											· · · · ·				
&M Reserve Fund Calculation:									·						
M Reserve Fund Calculation: Total O&M Costs		\$ 68,236,806													
	/365*60	\$ 68,236,806 11,217,009	312,472	740,323	30,050	3,757,699	220,336	184,273	1,065,616	228,345	1,201,824	88,132	299,259	2,888,380	200.302
Estimated Requirement		11,217,009					-								200,302
Total O&M Costs			312,472 296,659 15,813 \$	740,323 702,856 37,467 \$	30,050 28,530 1,520 \$	3,757,699 3,567,528 190,171 \$	220,336 209,185 11,151 \$	184,273 174,947 9,326 \$	1,065,616 1,011,687 53,929 \$	228,345 216,789 11,556 \$	1,141,002	88,132 83,672 4,460 \$	299,259 284,114 15,145 \$	2,742,205	200,302 <u>190,165</u> 10,137

.

H-1

	FY 2014 Budget	FY 2014 Actual	FY 2015 Budget	Proposed FY 2016 Budget	Increase/ (Decrease)
Routine O & M Costs	Duuget		Dudget	Buuger	(Decrease)
Variable	\$3,588,987	\$3,948,657	\$3,651,332	\$4,844,523	\$1,193,191
Fixed	1,464,503	2,462,162	1,765,358	1,780,003	14,645
Administration	1,214,657	1,220,237	1,250,914	1,316,163	65,249
Mandatory Costs	456,000	519,687	220,000	235,000	15,000
Inventory Stock	400,000			•	•
Routine O & M Costs without Labor		180,577	400,000	400,000	0
Labor	7,124,147	8,331,320	7,287,604	8,575,689	1,288,085
	4,227,098	4,630,807	4,299,182	4,381,034	81,852
Total Routine O & M Costs	11,351,245	12,962,127	11,586,786	12,956,723	1,369,937
Other Plant Costs					
Fuel	41,400,588	46,150,510	41,167,130	49,851,536	8,684,406
AB32 GHG Offset	5,650,224	7,460	0	0	0
CA ISO Charges (variable)	528,800	1,141,140	489,050	657,289	168,239
Debt Service	25,956,029	26,437,806	26,437,890	26,440,994	3,104
Insurance	997,500	796,274	1,000,425	820,000	(180,425)
Other Costs	63,558	40,703	51,781	56,875	5,094
Generation Services Shared	510,711	451,379	437,453	388,592	(48,861)
Administrative & General		•			• • •
Power Management Allocated Costs	1,750,798	1,722,989	1,728,654	1,905,508	176,854
Total O & M Costs	1,228,068	1,134,629	1,187,916	1,228,543	40,627
	89,437,521	90,845,017	84,087,085	94,306,060	10,218,975
Projects					
Operations & Maintenance	168,000	306,579	332,500	371,740	39,240
Capital	961,000	923,889	4,658,760	782,849	(3,875,911)
Maintenance Reserve	397,250	397,250	1,800,000	1,800,000	0
Total Projects Budget	1,526,250	1,627,718	6,791,260	2,954,589	(3,836,671)
Annual Budget Cost	90,963,771	92,472,735	90,878,345	97,260,649	6,382,304
Less: Third Party Revenue					
ISO Energy Sales	E2 240 004	FR C40 1C4	F4 F17 F02		12 762 141
Ancillary Services Sales	53,249,904	58,649,164	54,517,593	67,279,734	12,762,141
•	2,290,040	1,468,624	1,420,431	1,616,222	195,791
Interest Income - Operations	9,330	11,882	5,950	5,950	0
Interest Income (NCPA)	49,216	48,425	32,667	32,667	0
Interest Income (CDWR)	14,712	3,085	5,872	5,872	0
Other Income	0	791,502	0	. 0	0
Net Annual Budget Cost To Participants	55,613,202	60,972,682	55,982,513	68,940,445	12,957,932
Net Annual Budget Cost To Participants	\$35,350,569	\$31,500,053	\$34,895,832	\$28,320,204	(\$6,575,628)
Total Variable Costs	\$51,168,599	\$51,247,767	\$45,307,512	\$55,353,348	\$10,045,8 <sup>3</sup> 6
Total Fixed Costs	39,795,172	41,224,968	45,570,833	41,907,301	(3,663,532)
	\$90,984,421	\$88,618,182	\$90,878,345	\$97,260,649	\$6,382,304
Net Annual Generation (MWh)	1 254 057	1 241 800	1 207 542	1.005.404	207.052
. ,	1,354,957	1,241,899	1,207,542	1,605,494	397,952
Net Annual Budget Costs per MWh	\$26	\$25	\$29	\$18	(\$11)
Variable Costs per MWh	\$38	\$41	\$38	\$34	(\$3)
Fixed Costs per KW Month	\$12	\$12	\$14	\$12	(\$1)

H-3

	FY 2015 Budget	Proposed FY 2016 Budget	Increase/ (Decrease)
Variable O&M Costs			
Outside Services -			
Siemens LTSA	\$2,409,386	\$3,328,201	\$918,815
Other -			
Ammonia (SCR)	\$101,985	\$128,440	\$26,455
Emissions Chemicals/Gases	19,122	16,055	(3,067)
Water Treatment Waste Disposal	305,954	369,264	63,310
Dry Chemicals	216,717	272,934	56,217
Bulk Chemicals	280,458	369,264	88,806
Specialty Chemicals	127,481	112,385	(15,096)
Laboratory and Testing	140,229	160,549	20,320
GT Inlet Air Filters	50,000	63,096	- 13,096
Resin Bottle & Regeneration	0	24,335	24,335
Subtotal	1,241,946	1,516,322	274,376
Total Variable O&M	\$3,651,332	\$4,844,523	\$1,193,191

	FY 2015 Budget	Proposed FY 2016 Budget	Increase/ (Decrease)
Fixed O&M Costs			
Outside Services -			
Legal	40,000	40,000	0
Engineering	50,000	40,000	(10,000)
Insulation Maintenance	30,000	10,000	(20,000)
Temporary Labor	15,000	10,000	(5,000)
Buildings and Grounds	20,000	20,000	O O
Consultants	50,000	40,000	(10,000)
Corrosion Control	5,000	5,000	0
CEMS Support Contact	10,000	10,000	0
Fire Protection	30,000	30,000	0
Plant Information Services	30,000	30,000	0
Siemens LTSA	110,000	110,000	0
DCS Support	115,000	80,000	(35,000)
Predictive Maintenance	50,000	82,000	32,000
Specialty Chemical Services	0	61,020	61,020
Subtotal	555,000	568,020	13,020
Other -			
Equipment Rental	25,000	30,000	5,000
Safety Equipment	15,000	15,000	0
Lubricants	15,000	10,000	(5,000)
Consumables	50,000	50,000	, o
HRSG/Boilers	77,250	80,000	2,750
Gas Turbine	70,000	70,000	. 0
Steam Turbine	51,500	55,000	3,500
Generator	61,800	61,800	, 0
Misc Maintenance Mat. & Sup.	200,000	200,000	0
Water Treatment	100,000	100,000	0
Liquidated Gas Turbines Shared Facilities - O&M	174,808	170,183	(4,625)
Auxiliary Power Usage	370,000	370,000	Ŭ O
Subtotal	1,210,358	1,211,983	1,625
Total Fixed O&M	\$1,765,358	\$1,780,003	\$14,645

H-5

	FY 2015 Budget	Proposed FY 2016 Budget	Increase/ (Decrease)
Administration	······	······································	(20000)
Travel & Staff Development	30,750	30,000	(750)
Ground Lease	1,000,000	1,076,891	76,891
Liquidated Gas Turbines Shared Facilities - Administration	220,164	209,272	(10,892)
Total Administration ==	\$1,250,914	\$1,316,163	\$65,249
Mandatory Costs			
Air Permit Fee	\$45,000	\$40,000	(\$5,000)
Hazardous Waste Disposal	25,000	15,000	(10,000)
Regulatory Permit Services	50,000	50,000	Ó
Title V Permit Fee	100,000	100,000	0
Mechanical Integrity Test	0	15,000	15,000
RATA and Source Test	0	15,000	15,000
. –	\$220,000	\$235,000	\$15,000
Inventory			
Critical Gas Turbine Spares	\$100,000	\$100,000	\$0
Critical Spare Parts	300,000	300,000	0
	\$400,000	\$400,000	\$0
Labor			
Generation	\$3,305,474	\$3,359,782	\$54,308
Maintenance	993,708	1,021,252	27,544
=	\$4,299,182	\$4,381,034	\$81,852
Debt Service			
Issue #1 (NCPA) -			
Principal	\$4,885,417	\$5,131,250	\$245,833
Interest BABS Interest Subsidy	16,348,533	16,104,262	(244,271)
BABS INTEREST SUDSIDY -	(4,194,160)	(4,194,160)	0
	17,039,790	17,041,352	1,562
Issue #2 (CDWR) -			
Principal Interest	4,177,500	4,387,917	210,417
BABS Interest Subsidy	7,235,992	7,027,117	(208,875)
DADD ITTELEST DUDSKUY	(2,015,392)	(2,015,392)	0
. –	9,398,100	9,399,642	1,542
· -	\$26,437,890	\$26,440,994	\$3,104

H-6

	FY 2015	Proposed FY 2016	Increase/
	Budget	Budget	(Decrease)
Other Costs			
Debt Fees	\$37,448	\$42,542	\$5,094
Trustee Fees	11,000	11,000	0
NERC Compliance	3,333	3,333	0
	\$51,781	\$56,875	\$5,094
Generation Services Shared		<i>,</i>	
Salaries & Benefits	314,600	289,830	(24,770)
Other Costs	122,853	98,762	(24,091)
	437,453	388,592	(48,861)
			•
Administrative & General			
Administrative Support	\$1,239,763	\$1,384,596	\$144,833
General Support	488,891	520,912	32,021
•'	\$1,728,654	\$1,905,508	\$176,854
O&M Projects			
Plant Betterment	\$125,000	\$125,000	\$0
PI Performance Modules	80,000	0	(80,000)
Electrical Circuits Relocation	75,000	0	(75,000)
Inventory Parts Storage	52,500	0	(52,500)
Physical Security	0	169,740	169,740
Gas Plants Shared O&M Projects - Allocated	0	77,000	77,000
	\$332,500	\$371,740	\$39,240
Capital Projects			
Platforms (20)	150,000	150,000	0
Transmission Upgrade Project	4,508,760	632,849	. (3,875,911)
	\$4,658,760	\$782,849	(\$3,875,911)

#### Northern California Power Agency Lodi Energy Center Projects Detail

			FY 2015	Proposed FY 2016		Forecast FY 2017		cast 2018		recast 2019		orecast Y 2020		orecast ( 2021		orecast		Forecast FY 2023	Forecast FY 2024		orecast Y 2025	
Projects	Notes	Total	Budget	Budget		112017	114	2010	E I	2019	1.	1 2020	F	2021	r	1 2022		FT 2023	-1 2024	Г	1 2025	
Operations & Maintenance (O&M)		 																• ••••				
HRSG/Boiler Overhauls	- м	\$ 120,000	\$ -	\$.	- \$	30,000	\$	30,000	\$	30,000	\$	30,000	\$	-	\$	-	\$	-	\$	- \$		-
Injection Well Clean Maintenance	м	252,000	-			120,000	•		•	-	•	120,000		_			. *	12,000		- '		-
Plant Betterment	D	250,000	125,000	125,000				-		-				-		-				-		-
PI Performance Modules	D	80,000	80,000			-		-		-		-		-		-		-		-		-
Electrical Circuits Relocation	D	75,000	75,000		-	-		· -		-		-		-		-		-		_		-
Storage Depot	D	52,500	52,500		-	-		-		-		-		-		-		-		-		-
Steam Turbine Access	D	150,000	-		-	-	1	50,000		-		-		-		-		-		-		-
Cooling Tower Pump Down	D	100,000	-		-	-		-		-		100,000		-		-		-		-		-
Air Filter Puffer System	D	500,000	-		•	-		-		- '		· -		-		-		500,000		-		-
Gas Turbine Insulation	D	250,000	-		-	-		• -		-		-		· -				250,000		-		-
DCS Software Upgrades	D	200,000	-		•	-		-		-		-		-		200,000	1	-		-		-
BOP PLC Upgrades	D	125,000	-		-	-		-		-		-		-		125,000		-		-		-
iRig-B Time Stamping	D	30,000	-		•	30,000		-		-		-		-			-	-		-		-
HVAC	м	40,000	-		•	-		-		-		-		-		40,000		-		-		-
Physical Security	D	169,740	-	169,740	•	-		-		-		-		-				-		-		-
Gas Plants Shared O&M Projects - Allocated	D	77,000	-	77,000	)	-		-		-		-		-				-		-		-
Total O&M Projects Funding Requirement		\$ 2,471,240	\$ 332,500	\$ 371,740	)\$	180,000	\$ 1	80,000	\$	30,000	\$	250,000	\$	-	\$	365,000	\$	762,000	\$-	\$		_

Projects	Notes	Total	FY 20 Budg		Proposed FY 2016 Budget	Forecast FY 2017		Forecast FY 2018	Forecas FY 2019	-	Forecast FY 2020	Forecast FY 2021		ecast 2022	Forecas FY 2023		orecast Y 2024	 ecast 2025
Capital Projects																		
Title 22 Water Storage Evaluation	¯ D`	\$	- \$	-	\$ -	\$	- \$	-	\$	- \$	-	\$ -	\$	-	\$	- \$	-	\$ -
Platforms (20)	D	950,00	) 15	50,000	150,000	150,00	0	150,000	. 150.0	00	150,000	. 50,000	•	-	•	- '	-	-
Transmission Upgrades <sup>(1)</sup>	D	5,141,60	9 4,50	8,760	632,849	·	-			-	, _	• -		-		-	_	-
DCS	м	250,00		-	-		-	-		÷	-	-		-	250,0	00	-	-
Total Capital Projects Funding Requirement		\$ 6,341,60	9 \$ 4,65	58,760	\$ 782,849	\$ 150,00	0\$	150,000	\$ 150,0	00 \$	150,000	\$ 50,000		-	\$ 250,0	00 \$	-	\$ -

#### Notes:

D Discretionary

М Mandatory

1 Transmission Upgrades project was approved on April 10, 2014 in a Special LEC PPC meeting.

Authorization For Budget (AFB) is prepared for all projects greater than \$100K The Capital Projects listing above serves as a planning & budgeting tool. Agency, Federal Energy Regulatory Commission, and Governmental Accounting Standards Board capitalization rules, policies and guidelines will be applied as costs are incurred.

#### Northern California Power Agency Maintenance Reserves - Lodi Energy Center Budget FY 2016

Maintenance Reserves are set aside for the purpose of funding unanticipated, but Commission approved, cost overruns, extraordinary repairs, and maintenance not budgeted. Fund balances and annual replenishments are affected through the annual operating budget. The maintenance Reserve in held in two components:

- \* Annual Maintenance Contingency for the purpose of funding annual maintenance overruns, unanticipated annual maintenance and annual maintenance costs not budgeted, and
- \* Long-Term Maintenance Reserve for anticipated costs of future estimated scheduled overhauls and other major projects as anticipated in the annual budget. Generally the projects are significant in scope and cost, planned for completion in future years and affect the long term viability of the project. Funding is spread over a period of years to mitigate the cash flow demands. Funds should not be considered available to augment the annual budget or replace the Annual Maintenance Contingency.

In the FY2013 operations budget, funding was approved for a maintenance reserve to specifically provide cash for the first five year overhaul. The reserve is to cover those costs not covered under the Siemens LTSA (FY2018). Based on actual operating experience, the timing and requirements of the overhaul have changed and are reflected below.

	Fiscal Year Activity												
Funding/(Expenditures)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
LEC:													
Beginning Reserve Balance	775,584		-	-		-	-	-	-	· _	-		
Combustion Turbine (overha	(120,000)	(3,940,000)	-	-	(320,000)	(1,650,000)	-	-	(210,000)	(500,000)	-		
Steam Turbine	-	-	(145,000)	-	-	-	-	(20,000)	-	(125,000)	-		
Generators	-	-	(585,000)	-	-	-	-	(1,385,000)	-	-	-		
Plant Projects	-	(200,000)	(385,000)	(240,000)	-	(165,000)	(170,000)	(300,000)	(335,000)	(470,000)	-		
HRSG	-	(40,000)	(145,000)	(40,000)	-	(40,000)	(1,000,000)	(185,000)	· · ·	(40,000)	-		
Projected Requirements	(120,000)	(4,180,000)	(1,260,000)	(280,000)	(320,000)	(1,855,000)	(1,170,000)	(1,890,000)	(545,000)	(1,135,000)	-		
Funding Requirement	1,800,000	1,800,000	1,235,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000		
Cumulative Balance \$	2,455,584	\$ 75,584	\$ 50,584 \$	870,584 \$	1,650,584 \$	895,584 \$	825,584 \$	35,584	\$ 590,584 \$	555,584 \$	1,655,584		

# Northern California Power Agency Budgeted ISO Charges FY 2016

Table #	Program	Unit of Measure	Description
Table 17	LEC	GWh, GW	LEC Project Generation and Capacity
Table 18	LEC	GWh	LEC Export Energy
Table 19	LEC	# count	LEC Bid Segments
Table 20	LEC	\$	Grid Management Calculation
Table 21	LEC	# count	LEC Participant Inter-SC Sched Count
Table 22	LEC	\$	GMC Inter SC Trades Settlement
Table 23	LEC	\$	LEC Export Energy Costs
Table 24	LEC	\$	LEC Allocated Schedule 7 CAISO Costs
Table 25	LEC	\$	LEC Total Allocated CAISO Costs

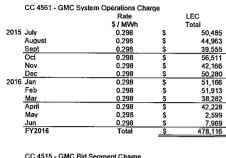
Table 17	LEC Project Generation & Capaci		Spinning Reserve Capacity	<u>Non Spinning</u> <u>Reserve</u> Capacity	Regulation Up Capacity	Regulation Down Capacity	Total Awards
		GWh	GW	GW	GW	GW	
2015	July	169.527	0.418		9,448	32.448	211.841
	August	150.984	0.319		4.779	30,556	186.637
	Sept	132.824	0.344		3.510	30,272	166.950
	October	189.761	0.002		1.280	41.908	232.951
	November	141.590			-	30.272	171.862
	December	168.839			5.392	33.015	207.247
2016	January	171.814	-		5,581	33,867	211.262
	February	174.323	-		5.014	34,434	213.771
	March	128.548	-		0.851	29.231	158.631
	April	141.800	-		0.438	30,745	172.983
	May	8.726	-		0.225	2.365	11.316
	June	26.758	0.075		1.821	6.244	34.898
	FY2016 Total	1605.494	1.158	0.000	38,339	335,357	1980.348

#### Table 18 LEC Export Energy in GWh

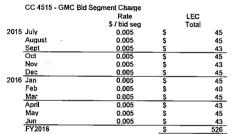
Table 18	LEC Export Energy in GWI	h									0.0000%					
			Azusa	BART	Biogs	CDWR	Gridley	Healdsburg	Lodi	Lompoc	MID	Plumas	PWRPA	Santa Clara	Ukiah	Total Export Oty
2015			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	August		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Sept		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000
	October		0.0000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000
	November		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	December		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,0000
2016	January		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0,0000	0.0000
	February		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	March		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	. 0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000
	April		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	May		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	June		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000
	FY2012		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Table 19	LEC Bid Segments		Energy Sp	in Reserve Cap N	Spin Reserve	Reg Up Capacity Re	eg Dn Capacity T	otal Bid Segments								
2015	July	744	5,952	744	744	744 ]	744	8,928								
	August	744	5,952	744	744	744	744	8,928								
	Sept	720	5,760	720	720	720	720	8,640								
	October	744	5,952	744	744	744	744	8,928								
	November	720	5,760	720	720	720	720	8,640								
	December	744	5,952	744	744	744	744	8,928								
2016	January	744	5,952	744	744	744	744	8,928								
	February	672	5,376	672	672	672	672	8,064								
	March	744	5,952	744	744	744	744	8,928								
	April	720	5,760	720	720	720	720	8,640								
	May	744	5,952	744	744	744	744	8,928								
	June	720	5,760	720	720	720	720	8,640								
	FY2016	Total	70,080	8,760	8,760	8,760	8,760	105,120								

Note: Bid Segments assumed DA and RT Energy Bid curve with 4 bid segments each; and, Spin, NSpin, RegUp and RegDn with 1 bid segment each.

#### Northern California Power Agency Budgeted ISO Charges FY 2016 Table 20 Grid Management Calculation



CC 4560 - GM	C Market Services	Charge	
	Rate		LEC
	\$ / MW		Total
2015 July	0.088	\$	18,557
August	0.088	s	16,349
Sept	0.088	Ś	14,625
Oct	0.088	\$	20,406
Nov	0.088	\$	15,055
Dec	0.088	s	18,155
2016 Jan	0.088	\$	18,507
Feb	0.088	s	18,726
Mar	0.088	\$	13,896
April	0.088	S	15,153
May	0.088	Ś	991
Jun	0.088	Ś	3,057
FY2016	Total	S	173,478



CC 4575 - GM	C Customer Charge
	Rate
	\$/SC-mo
2015 July	0.00
August	0.00
Sept	0.00
Oct	0.00
Nov	0.00
Dec	0.00
2016 Jan	0.00
Feb	0.00
Mar	0.00
April	0.00
May	0,00
Jun	0.00
FY2016	

	Total GMC for LEC		
			LEC
		Tota	I GMC Amt.
2015	July	\$	69,087
	August	5 5 5	61,357
	Sept	s	54,223
	Oct	\$	76,962
	Nov	\$ \$ \$	57,264
	Dec	\$	68,480
2016	Jan	\$	69,717
	Feb	\$ \$ \$	70,680
	Mar	\$	52,222
	April	\$	57,425
	May	\$	3,635
	Jun	\$	11.069
	FY2016	\$	652,120
	-		

#### Table 21 LEC Participant Inter-SC Sched Count

		Azusa	BART	Biggs	CDWR	Gridley	Healdsburg	Lođi	Lompoc	MID	Plumas	PWRPA	Santa Clara	Ukiah	Total Count	
	59% Capacity Factor								· · · · · ·							-
2015 July	439					· ·			1 1	1		439	1		439	
August	439									i		439			439	
Sept	425								1			425			425	\$
October	439											439			439	Ē
November	425					· ·		1				425	i i i		425	4
December	439											439			439	1
2016 January	439											439	1		439	, -
February	396											396			396	
March	438											438			438	4
April	425											425		-	42	5
Мау	439							· ·				439			439	4
June FY2016	425			·								425			425	
	Total	-	-	-	-	-		·	· · ·	- '	-	5,168	- '	-	5,168	5
Note: Assumed o	one inter-sc trade of energy to	PWRPA each hour													-1	-

Table 22	2 GMC Inter SC Tr	ades Settlement																													
		Rate		Azusa		BART		Bigg	<b>7</b> 5	CD	WR		Gridley	Hea	aldsburg		Lodi		Lompoc		MID		Plumas		PWRPA	Sa	anta Clara		Ukiah	Tota	a Amount
		\$ / Schedule-hr																	-												
201	5 July	1.000	\$	-	\$		- 1	\$	- 1	S	-	s	-	s	-	l s	-	15	· -	s	-	I S		ls.	439	1.8	-	Is	-	i	439
	August	1.000	\$	-	\$		-	\$	-	\$	-	Ś	-	ŝ	-	l s	-	15	-	š	-	š	-	ŝ	439		-	l s	-		439
	Sept	1.000	S	-	\$		-	\$	-	s	-	s	-	s	-	Ś	-	15	-	s	-	š	-	ŝ	425		-	ŝ			425
	October	1.000	\$	-	\$		-	\$	-	s	-	S	-	S		Ś	-	5	· -	Š	-	Š	-	Š	439			15	-		439
	November	1.000	\$	-	s		-	\$	-	Ś	-	ls .	-	Ś	-	Ś	-	s	-	š	-	ŝ		ls.	425		-	š	-		425
	December	1.000	\$	-	\$		-	\$	-	Ś	-	s	-	š	-	s	-		-	š	-	š		lš.	439		-	ŝ	-		439
201	6 January	1.000	\$	-	\$		-	\$	-	S	-	Ś		S	-	Ś	-		-	Š		ŝ		Š	439			Š	-		439
	February	1.000	s	-	Ś		- 1	Ś	-	Ś	-	Ś	-	5	-	Š	-			ŝ	-	š	-	١č	396	l č	_	1.	_		396
	March	1.000	S	- 1	Ś		- 1	ŝ	-	ŝ		ŝ	-	ŝ		š	-			š		ě		١č	438	۱š –	-	l č	-		438
	April	1.000	Ś	-	Ś		-	ŝ	-	ŝ		ŝ		Š		Š		- 3		š		š		1÷	425			1			435
	May	1,000	Ś	- 1	š		-	š	-	ŝ		Š	_	š	_	š				ě		š	-	1	439		-	ě	-		425
	June	1.000	Ś	-	Ś		-	Ś	-	ŝ	-	lš.	-	ŝ		Š	_	3		15	_	le.	-	1	435		-	1 s	-		435
	FY2016	Total					-	•		·	-	, y					-		-			1.4		1.9	5,168	<u>. 4</u>	-	14			5,168

# Northern California Power Agency Budgeted ISO Charges FY 2016 Table 23 LEC Export Energy Costs

Table 23 LEC Export Energy	LOSIS																									
(Based on ISO net ex	port energy - Table 2)																									
	Rate	Azusa		BART		Biggs		CDWR		Gridley	Healdsburg	Lodi	Lo	mpoc		MID	PI	umas	P٧	NRPA	Sar	ta Clara	1	Jkiah	Total Ex	port Cost
	S/MWh																									
2015 July	9.547 \$	\$	-  \$		-   :	ş -	\$	-	\$	-	\$ -	\$ -	\$	-	s	- 1	s	-	s	-	s	-	\$	-	5	-
August	9.547 \$	5	-  \$		- 1	\$-	\$	-	\$	-	\$ -	\$ - 1	\$	- 1	\$	-	s	-	\$	-	\$	-	\$	-	\$	-
Sept	9.547 \$	\$	-  \$		- 1	s -	\$	-	Ş	-	\$ -	\$ -	\$	-	\$	- 1	S	-	s	-	i s	-	S	-	\$	-
October	9.547 \$	\$	- \$		-	\$ -	\$	-	\$	-	\$ -	\$ -	\$		\$	-	\$	-	\$	-	\$	-	\$	-	\$	~
November	9.547 \$	\$	-  \$		- 1	ş -	\$	-	\$	-	\$ -	\$ - 1	\$	-	\$	-	s	-	\$	· _	s	-	s	-	\$	-
December	9.547 \$	5	-  \$		- 1	s -	\$	-	\$	-	\$ -	\$ -	\$	-	Ś	- 1	S	-	Ś	-	s	-	S	-	s	-
2016 January	9.547 \$	\$	- \$			\$ -	\$	-	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	S	-
February	9.547 \$	\$	-  \$			s -	\$	-	\$	-	\$ -	\$ -	s	-	Ś	-	Ś	-	Ś	-	Ś	-	s	-	s	-
March	9.547 \$	\$	- \$			\$-	s	-	\$	-	\$ · -	\$ -	\$		\$	-	\$	-	s	-	Ś	-	ŝ	- '	\$	-
April	9.547 \$	s	- \$			ş -	\$	-	\$	-	\$ -	\$ -	\$	- 1	\$	-	\$		s	-	\$	-	S	-	S	-
May	9.547 9	\$	-  \$		-	s -	\$	-	\$	-	\$ -	\$ -	\$	-	Ś		Ś	-	s	-	Ś	-	ŝ	-	ŝ	-
June	9.547 \$	\$	- \$		-	\$ -	\$	-	\$	-	\$ -	\$ -	\$	- 1	\$	-	\$	-	\$	-	\$	-	s	-	\$	-
FY2016	Total 5	\$	- \$		-	ş -	\$	-	\$	-	\$ -	\$ -	\$	-	\$		\$	-	\$	-	\$	-	\$	-	\$	-

#### Table 24 LEC GMC Operating Costs

			Azusa	BART	Biggs	CDWR	Gridley	Healdsburg	Lodi	Lompoc	MID	Plumas	PWRPA	Santa Clara	Ukiah	
			2.7857%	6.6000%	0.2679%	33,5000%	1.9643%	1.6428%	9,5000%	2.0357%	10.7143%	0.7857%	2.6679%	25.7500%	1.7857%	NCPA-SC
2015 July	\$	69,087.07	5 1,925 \$	4,560		5 23,144 \$	1,357   \$	5 1,135   1	\$ 6,563	\$ 1,406	\$ 7,402	\$ 543	\$ 1,843 \$	\$ 17,790   \$	1,234 \$	69,087
August	\$	61,357.10	5 1,709 \$	4,050			1,205 \$	5 1,008	\$ 5,829	\$ 1,249	\$ 6,574	\$ 482	\$ 1,637 \$	\$ 15,799 \$	1,096 \$	61,357
Sept	\$	54,222.99	<u> </u>				1,065 \$		\$ 5,151			\$ 426	\$ 1,447 \$	\$ 13,962 \$	968 \$.	54,223
Oct	\$	76,961.96	5 2,144   \$	5,079			1,512 \$	1,264		\$ 1,567	\$ 8,246	\$ 605	\$ 2,053 \$			76,962
Nov	· \$	57,263.81	6 1,595 \$	3,779		5 19,183 \$	1,125 \$	941	\$ 5,440	\$ 1,166	\$ 6,135	\$ 450	\$ 1,528 \$	s 14,745 s	1,023 \$	57,264
Dec	\$	68,479.70	<u>1,908 \$</u>	4,520			1,345 \$	5 1,125	\$ 6,506	\$ 1,394	\$ 7,337	\$ 538	\$ 1,827 \$	5 17,634 \$	1,223 \$	68,480
2016 Jan	\$	69,717.42	5 1,942 \$	4,601	\$ 187 5	\$ 23,355 \$	1,369 \$	5 1,145	\$ 6,623	\$ 1,419	\$ 7,470	\$ 548	\$ 1,860 \$	§ 17,952 \$	1,245 \$	69,717
Feb	\$	70,680.07	5 1,969 \$	4,665	\$ 189 5	\$ 23,678 \$	1,388 \$	5 1,161	\$ 6,715	\$ 1,439	\$ 7,573	\$	\$ 1,886 \$	5 18,200 \$	1,262 \$	70,680
Mar	\$	52,222.29	\$ 1,455 \$	3,447	\$ 140 5	5 17,494 \$	1,026 \$	858	\$ 4,961	\$ 1,063	\$ 5,595	\$ 410	\$ 1,393	\$ 13,447   \$	933 \$	52,222
April	\$	57,424.52	5 1,600 \$	3,790	\$ 154 \$	§ 19,237 \$	1,128 \$	943	\$ 5,455	\$ 1,169	\$ 6,153	\$ 451	\$ 1,532	5 14,787 \$	1,025 \$	57,425
May	\$	3,634.52	5 101 \$	240	\$ 10 5	6 1,218 \$	71 \$	60	\$ 345	\$ 74	\$ 389	\$ 29	\$ 97   5	6 936 <b>(</b> \$	65 \$	3,635
Jun	\$	11,068.76	308 \$	731	\$ 30 5	\$ 3,708 \$	217 \$	5 182	\$ 1,052	\$ 225	\$ 1,186	\$ 87	\$ 295 \$	2,850 \$	198 \$	11,069
FY2016	\$	652,120.20	5 18,166 \$	43,040	\$ 1,747	\$ 218,460 \$	12,810 \$	5 10,713	\$ 61,951	\$ 13,275	\$ 69,870	\$ 5,124	\$ 17,398 \$	167,921 \$	11,645 \$	652,120

Note: LEC GMC Operating Costs represents sum of total LEC budgeted CAISO costs associated with Systems Operations charge, Market Services charge Bid Segment charge, and Customer Charge.

#### Table 25 LEC Total Allocated CAISO Costs

	Azusa BAR	RT Biggs	CDWR	Gridley	Healdsburg	Lodi	Lompoc	MID	Plumas	PWRPA	Santa Clara	Ukiah T	otal Amount
2015 July \$	1,925   \$	4,560 \$ 185 \$	23,144   \$	1,357 \$	1,135 \$	6,563 \$	1,406   \$	7,402   \$	543   \$	2,282	17,790 \$	1,234	69,526
August \$	1,709 \$	4,050 \$ 164 \$	20,555 \$	1,205 \$	1,008 \$	5,829 \$	1,249 \$	6,574 \$	482 \$	2,076	15,799 \$	1,096	61,796
Sept \$	1,510 \$	3,579 \$ 145 \$	18,165 \$	1,065 \$	891 \$	5,151 \$	1,104 \$	5,810 \$	426 \$	1,871	13,962 \$	968	54,648
Oct \$	2,144 \$	5,079 \$ 206 \$	25,782 \$	1,512 \$	1,264 \$	7,311 \$	1,567 \$	8,246 \$	605 \$	2,492 \$	5 19,818 \$	1,374	5 77,401
Nov \$	1,595 \$	3,779 \$ 153 \$	19,183 \$	1,125 \$	941 \$	5,440 \$	1,166 \$	6,135 \$	450 S	1,953	14,745 \$	1,023	5 57,689
Dec \$	1,908 \$	4,520 \$ 183 \$	22,941 \$	1,345 \$	1,125 \$	6,506 \$	1,394 \$	7,337 \$	538 \$	2,266	5 17,634 \$	1,223	68,919
2016 Jan \$	1,942   \$	4,601 \$ 187 \$	23,355 \$	1,369 \$	1,145 \$	6,623 \$	1,419 \$	7,470 \$	548 \$	2,299	5 17,952 \$	1,245	\$ 70,156
Feb \$	1,969 \$	4,665 \$ 189 \$	23,678 \$	1,388 \$	1,161 \$	6,715 \$	1,439 \$	7,573 \$	555 \$	2,282	18,200 \$	1,262	5 71,077
Mar S	1,455 \$	3,447 \$ 140 \$	17,494   \$	1,026 \$	858 \$	4,961 \$	1,063 \$	5,595 \$	410 \$	1,832 \$	5 13,447 \$	933	5 52,661
April \$	1,600 \$	3,790 \$ 154 \$	19,237 \$	1,128 \$	943 \$	5,455 \$	1,169 \$	6,153 \$	451 \$	1,957 \$		1,025	\$ 57,849
May \$	101 \$	240 \$ 10 \$	1,218 \$	71   \$	60 \$	345 \$	74 \$	389 \$	29 \$	536 \$	936 \$	65	\$ 4,073
Jun \$	308 \$	731 \$ 30 \$	3,708 \$	217 \$	182 \$	1,052 \$	225 \$	1,186 \$	87 \$	720 \$	5 2,850 \$	198	5 11,494
FY2016 Total S	18,166 \$	43,040 \$ 1,747 \$	218,460 \$	12,810 \$	10,713 \$	61,951 \$	13,275 \$	69,870 \$	5,124 \$	22,566	\$ 167,921 \$	11,645 🕷	\$ 11 11 1657 289

Note: Sum of budgeted CAISO SC costs for LEC Project, inter-SC member costs, and member export costs

Table 1 LEC Project Ancillary Services Capacity Revenue Budget

					Azusa	BART	Biggs	<u>CDWR</u>	Gridley	Hea	ldsburg		<u>Lodi</u>		ompoc		MID	<u>Plumas</u>	P	WRPA	Sar	ita Clara	Ī	<u>Ukiah</u>	N	CPA-SC
<u>Year</u>	<u>Month</u>	<u>Tota</u>	l Revenue		2.7857%	6.6000%	0.2679%	33.5000%	1.9643%	1.6	428%	9	5000%	2.	0357%	10	0.7143%	0.7857%	2	.6679%	25.	7500%	1.1	7857%	1	100.0000%
2015	July	\$	199,312	\$	5,552	\$ 13,155 \$	5 534	\$ 66,770	\$ 3,915	\$	3,274	\$	18,935	\$	4,057	\$	21,355	\$ 1,560	5 \$	5,317	\$	51,323	\$	3,559	\$	199,312
	August	\$	163,551	\$	4,556	\$ 10,794 \$	5 438	\$ 54,790	\$ 3,213	\$	2,687	\$	15,537	\$	3,329	\$	17,523	§ 1,28	5 \$	4,363	\$	42,114	\$	2,921	\$	163,551
	Sept	\$	153,447	\$	4,275	\$ 10,127 \$	6 411	\$ 51,405	\$ 3,014	\$	2,521	\$	14,577	\$	3,124	\$	16,441	\$ 1,20	5 \$	4,094	\$	39,513	\$	2,740	\$	153,447
	Oct	\$	170,833	\$	4,759	\$ 11,275 \$	<b>458</b>	\$ 57,229	\$ 3,356	\$	2,806	\$	16,229	\$	3,478	\$	18,304	\$ 1,34	2 \$	4,558	\$	43,989	\$	3,051	\$	170,833
	Nov	\$	126,493	\$	3,524	\$ 8,349 \$	339	\$ 42,375	\$ 2,485	\$	2,078	\$	12,017	\$	2,575	\$	13,553	\$ 994	1 \$	3,375	\$	32,572	\$	2,259	\$	126,493
	Dec	\$	163,593	\$	4,557	\$ 10,797 \$	438	\$ 54,804	\$ 3,213	\$	2,688	\$	15,541	\$	3,330	\$	17,528	\$ 1,28	5   \$	4,364	\$	42,125	\$	2,921	\$	163,593
2016	Jan	\$	174,645	\$	4,865	\$ 11,527 \$	6 468	\$ 58,506	\$ 3,431	\$	2,869	\$	16,591	\$	3,555	\$	18,712	\$ 1,37	2 \$	4,659	\$	44,971	\$	3,119	\$	174,645
	Feb	\$	157,993	\$	4,401	\$ 10,428 \$	6 423	\$ 52,928	\$ 3,103	\$	2,596	\$	15,009	\$	3,216	\$	16,928	\$ 1,24	i   \$	4,215	\$	40,683	\$	2,821	\$	157,993
	Mar	\$	123,463	\$	3,439	\$ 8,149 \$	5 331	\$ 41,360	\$ 2,425	\$	2,028	\$	11,729	\$	2,513	\$	13,228	\$ 97	) \$	3,294	\$	31,792	\$	2,205	\$	123,463
	April	\$	133,664	\$	3,723	\$ 8,822 \$	358	\$ 44,777	\$ 2,626	\$	2,196	\$	12,698	\$	2,721	\$	14,321	\$ 1,05	) \$	3,566	\$	34,418	\$	2,387	\$	133,664
	May	\$	9,586	\$	267	\$ 633 \$	6 26	\$ 3,211	\$ 188	\$	157	\$	911	\$	195	\$	1 027	\$ 7	5 \$	256	\$	2,469	\$	171	\$	9,586
	Jun	\$	39,642	\$	1,104	\$ 2,616 \$	6 106	\$ 13,280	\$ 779	\$	651	\$	3,766	\$	807	\$	4,247	\$31	i   \$	1,058	\$	10,208	\$	708	\$	39,642
		\$	1,616,222	æ	45,023	\$ 106,671 \$	6 4,330	\$ 541,434	\$ 31,747	\$	26,551	\$	153,541	\$	32,901	\$	173,167	\$ 12,69	9 \$	43,119	\$	416,177	\$	28,861	\$	1,616,222

#### Table 2 LEC Project ISO Energy Sales Revenue Budget

			Azusa	<u>BART</u>	Biggs	<u>CDWR</u>	Gridley	Healdsburg	Lodi	Lompoc	MID	<u>Plumas</u>	<b>PWRPA</b>	Santa Clara	<u>Ukiah</u>	NCPA-SC
Year	Month	Total Revenue	2.7857%	6,6000%	0.2679%	33.5000%	1.9643%	1.6428%	9,5000%	2.0357%	10.7143%	0.7857%	2.6679%	25.7500%	1.7857%	100.0000%
2015	July	\$ 6,860,220 \$	191,105 \$	452,774 \$	18,379 \$	2,298,174 \$	134,755	\$ 112,700	\$ 651,721	\$ 139,653	\$ 735,025 \$	53,901	\$ 183,024	\$ 1,766,507	\$ 122,503	\$ 6,860,220
	August	\$ 6,341,098 \$	176,644 \$	418,512 \$	16,988 \$	2,124,268 \$	124,558	\$ 104,172	\$ 602,404	\$ 129,086	\$ 679,404 \$	49,822	\$ 169,174	\$ 1,632,833	\$ 113,233	\$ 6,341,098
	Sept	\$ 5,545,049 \$	154,468 \$	365,973 \$	14,855 \$	1,857,591 \$	108,921	\$ 91,094	\$ 526,780	\$ 112,881	\$ 594,113 \$	43,567	\$ 147,936	\$ 1,427,850	\$ 99,018	\$ 5,545,049
	Oct	\$ 7,979,090 \$	222,274 \$	526,620 \$	21,376 \$	2,672,995 \$	156,733	\$ 131,080	\$ 758,014	\$ 162,430	\$ 854,904 \$	62,692	\$ 212,874	\$ 2,054,616	\$ 142,483	\$ 7,979,090
	Nov	\$ 5,997,737 \$	167,079 \$	395,851 \$	16,068 \$	2,009,242 \$	117,814	\$ 98,531	\$ 569,785	\$ 122,096	\$ 642,616 \$	47,124	\$ 160,014	\$ 1,544,417	\$ 107,102	\$ 5,997,737
	Dec	\$ 7,130,167 \$	198,625 \$	470,591 \$	19,102 \$	2,388,606 \$	140,058	\$ 117,134	\$ 677,366	\$ 145,149	\$ 763,947 \$	56,022	\$ 190,226	\$ 1,836,018	\$ 127,323	\$ 7,130,167
2016	Jan	\$ 7,356,066 \$	204,918   \$	485,500 \$	19,707 \$	2,464,282 \$	144,495	\$ 120,845	\$ 698,826	\$ 149,747	\$ 788,151 \$	57,797	\$ 196,252	\$ 1,894,187	\$ 131,357	\$ 7,356,066
	Feb	\$ 7,393,615 \$	205,964 \$	487,979 \$	19,807 \$	2,476,861 \$	145,233	\$ 121,462	\$ 702,393	\$ 150,512	\$ 792,174 \$	58,092	\$ 197,254	\$ 1,903,856	\$ 132,028	\$ 7,393,615
	Mar	\$ 5,402,462 \$	150,496 \$	356,562 \$	14,473 \$	1,809,825 \$	106,121	\$ 88,752	\$ 513,234	\$ 109,978	\$ 578,836 \$	42,447	\$ 144,132	\$ 1,391,134	\$ 96,472	\$ 5,402,462
	April	\$ 5,884,913 \$	163,936 \$	388,404 \$	15,766 \$	1,971,446 \$	115,597	\$ 96,677	\$ 559,067	\$ 119,799	\$ 630,527 \$	46,238	\$ 157,004	\$ 1,515,365	\$ 105,087	\$ 5,884,913
	May	\$ 342,051 \$	9,529 \$	22,575 \$	916 \$	114,587 \$	6,719	\$ 5,619	\$ 32,495	\$ 6,963	\$ 36,648 \$	2,687	\$ 9,126	\$ 88,078	\$ 6,108	\$ 342,051
	Jun	<u>\$ 1,047,266</u> \$⁄	29,174 \$	69,120 \$	2,806 \$	350,834 \$	20,571	\$ 17,204	\$ 99,490	\$ 21,319	\$ 112,207 \$	8,228	\$ 27,940	\$ 269,671	\$ 18,701	\$ 1,047,266
		\$ 67,279,732	1,874,212 \$	4,440,462 \$	180,242 \$	22,538,710 \$	1,321,576	\$ 1,105,271	\$ 6,391,575	\$1,369,614	\$ 7,208,552	528,617	\$1,794,956	\$17,324,531	\$1,201,414	\$ 67,279,732

			Spinning Reserve Revenue Budget	-	Reg Up Capacity Revenue Budget	<u>Ca</u>	Reg Down pacity Revenue Budget	al A/S Capacity evenue Budget Amount
2015	July		\$ 2,998	\$	68,035	\$	128,279	\$ 199,312
	August		\$ 2,937	\$	37,254	\$	123,360	\$ 163,551
	Sept		\$ 2,379	\$	29,445	\$	121,623	\$ 153,447
	October		\$ 12	\$	7,703	\$	163,118	\$ 170,833
	November		\$ -	\$	-	\$	126,493	\$ 126,493
	December		\$ 	\$	33,409	\$	130,183	\$ 163,593
2016	January		\$ -	\$	37,556	\$	137,089	\$ 174,645
	February		\$ -	\$	30,464	\$	127,529	\$ 157,993
	March		\$ -	\$	6,124	\$	117,340	\$ 123,463
	April		\$ -	\$	2,918	\$	130,746	\$ 133,664
	May		\$ 20	\$	1,682	\$	7,885	\$ 9,586
	June		\$ 573	\$	14,288	\$	24,781	\$ 39,642
		Total	\$ 8,919	\$	268,879	\$	1,338,424	\$ 1,616,222

#### LEC Spinning Reserve Capacity Revenue

Year	<u>Month</u>	Spinning Reserve Market Price	Spinning Reserve Capacity in GW	Capaci	ng Reserve ity Revenue Budget
2015	7	7.166	0.42	\$	2,998
	8	9.212	0.32	\$	2,937
	9	6.913	0.34	\$	2,379
	10	5.201	0.00	\$	12
	. 11		-	\$	-
	12		-	\$	-
2016	1		-	\$	-
	2		-	\$	-
	3		-	\$	-
	4		-	\$	
	5		-	\$	20
	6	7.684	0.07	\$	573
	Total		1.16	\$	8,919

#### LEC Regulation Up Capacity Revenue

<u>Year</u>	Month	Reg Up Market Price	Regulation Up Capacity in GW	 tegulation Up pacity Revenue Budget
2015	7	7.201	9.45	\$ 68,035
	8	7.796	4.78	\$ 37,254
	9	8.390	3.51	\$ 29,445
	10	6.020	1.28	\$ 7,703
	11		-	\$ -
	12	6.196	5.39	\$ 33,409
2016	1	6.729	5.58	\$ 37,556
	2	6.076	5.01	\$ 30,464
	3	7.192	0.85	\$ 6,124
	4	6.666	0.44	\$ 2,918
	5	7.477	0.22	\$ 1,682
	6	7.845	1.82	\$ 14,288
	Total		38.34	\$ 268,879

#### LEC Regulation Down Capacity Revenue

Year	Month	<u>Reg Down</u> Market Price	Regulation Down Capacity in GW	 egulation Down apacity Revenue Budget
2015	7	3.953	32.45	\$ 128,279
	8	4.037	30.56	\$ 123,360
	9_	4.018	30.27	\$ 121,623
	10	3.892	41.91	\$ 163,118
	11	. 4.179	30.27	\$ 126,493
	12	3.943	33.02	\$ 130,183
2016	1	4.048	33.87	\$ 137,089
	2	3.704	34.43	\$ 127,529
	3	4.014	29.23	\$ 117,340
	4	4.253	30.74	\$ 130,746
	5	3.334	2.37	\$ 7,885
	6	3.969	6.24	\$ 24,781
			335.36	\$ 1,338,424

#### LEC HLH Energy Revenue

<u>Year</u>	<u>Month</u>	Energy Market Price	Energy GWh	En	ergy Revenue Budget
2015	7	43.833	101.72	\$	4,458,696
	8	45.000	100.63	\$	4,528,310
	9	44.000	97.63	\$	4,295,476
	10	44.667	122.76	\$	5,483,255
	11	44.750	101.38	\$	4,536,916
	12	44.833	110.25	\$	4,942,694
2016	1	45.083	104.98	\$	4,732,755
	2	44.250	111.34	\$	4,926,781
	3	43.417	102.71	\$	4,459,521
	4	43.417	102.06	\$	4,431,015
	5	39.667	8.14	\$	322,728
	6	39.917	24.42	\$	974,849
			1.088.01	\$	48.092.995

#### LEC LLH Energy Revenue

Year	Month	Energy Market Price	Energy GWh	<u>E</u>	<u>nergy Revenue</u> Budget
2015	7	35.417	67.81	\$	2,401,524
	8	36.000	50.36	\$	1,812,788
	9	35.500	35.20	\$	1,249,573
	10	37.250	67.00	\$	2,495,835
	11	36.333	40.21	\$	1,460,822
	12	37.333	58.59	\$	2,187,473
2016	1	39.250	66.84	\$	2,623,311
	2	39.167	62.98	\$	2,466,833
	3	36.500	25.83	\$	942,941
	4	36.583	39.74	\$	1,453,898
	5	32.750	0.59	\$	19,323
	6	31.000	2.34	\$	72,416
	-		517.48	\$	19,186,737

H-15

#### NORTHERN CALIFORNIA POWER AGENCY Shared Facilities - Gas Plants Comparative Annual Budget Report

				Proposed	
	FY 2014	FY 2014	FY 2015	FY 2016	Increase/
	Budget	Actual	Budget	Budget	(Decrease)
Shared Costs					
Operations	\$166,022	\$106,286	\$76,040	\$103,540	\$27,500
Maintenance	107,150	246,682	186,335	160,000	(26,335)
Administration	312,123	262,643	320,170	298,110	(22,060)
Projects	0	0	0	110,000	110,000
Shared Costs without Labor	\$585,295	\$615,611	\$582,545	\$671,650	\$89,105
Summary of Costs by Subprograms per PMOA Schedule	e 4.00				
Anhydrous Ammonia System (subprog 001)	\$20,000	\$286	\$15,000	\$15,000	\$0
Administration/Warehouse Building (subprog 002)	494,883	589,342	510,795	558,530	47,735
230 Kv Switchyard Common Equip (subprog 004)	11,725	(569)	24,000	24,000	0
Tooling and Special Equipment (subprog 005)	14,317	0	4,120	44,120	40,000
Vehicle Usage (subprog 007)	44,370	26,551	28,630	30,000	1,370
	\$585,295	\$615,611	\$582,545	\$671,650	\$89,105
Liquidation to Plants					
CT 1				ſ	
Operations	\$23,950	\$13,007	\$9,125	\$12,425	\$3,300
Maintenance	28,802	49,961	35,032	38,400	3,368
Administration	48,285	31,649	43,400	35,293	(8,107)
Projects	0	0	0	13,200	13,200
•	101,037	94,617	87,557	99,318	11,761
CT 2		,		,,	
Operations	28,239	19,089	13,687	18,637	4,950
Maintenance	16,253	41,010	29,724	23,896	(5,828)
Administration	54,182	47,268	56,606	53,545	(3,061)
Projects	0	0	0	19,800	19,800
	98,674	107,366	100,017	115,878	15,861
LEC		'	,	<b>,</b>	,
Operations	113,833	74,189	53,228	72,478	19,250
Maintenance	62,094	155,711	121,580	97,705	(23,875)
Administration	209,656	183,727	220,164	209,272	(10,892)
Projects	, 0	0	0	77,000	77,000
	385,584	413,627	394,971	456,454	61,483

#### NORTHERN CALIFORNIA POWER AGENCY Shared Facilities - Gas Plants Comparative Annual Budget Report

	FY 2015 Budget	Proposed FY 2016 Budget	Increase/ (Decrease)
Operations Expense Plant -			
Safety Supplies & Equipment (subprog 002)	10,815	38,315	27,500
Communication Services - Intranet (subprog 002)	45,000	45,000	0
	55,815	83,315	27,500
Other Costs -			
Telephone & Dedicated Comm. (subprog 002)	20,225	20,225	0
	20,225	20,225	0
	\$76,040	\$103,540	\$27,500
Maintenance Expense Plant -		• · ·	
Ammonia System Maintenance (subprog 001)	\$15,000	\$15,000	\$0
Misc. Maint Materials & Supplies (subprog 002)	40,000	45,000	5,000
Tools/Shop/Warehouse Equipment (subprog 002)	25,000	30,000	5,000
Switchyard (subprog 004)	20,000	20,000	0
Vehicle Fuel/Maintenance (subprog 007)	21,630	30,000	8,370
	121,630	140,000	18,370
Other Costs -			
HVAC Services (subprog 002)	15,000	15,000	0
Plant Information Services (subprog 002)	44,705	0	(44,705)
Equipment Rentals (subprog 002)	5,000	5,000	0
	64,705	20,000	(44,705)
	\$186,335	\$160,000	(\$26,335)

#### NORTHERN CALIFORNIA POWER AGENCY Shared Facilities - Gas Plants Comparative Annual Budget Report

	FY 2015 Budget	Proposed FY 2016 Budget	Increase/ (Decrease)
Administration Expense			<i>i</i>
Outside Services -			
Legal Services (subprog 002)	\$10,000	\$22,440	\$12,440
Janitorial Services (subprog 002)	15,000	15,000	0
-	25,000	37,440	12,440
Other Costs -			
Travel (subprog 002)	53,000	53,000	. 0
Staff Development (subprog 002)	50,750	50,750	0
Safety Equipment/Program (subprog 002)	25,000	0	(25,000)
Communications Hardware (subprog 005)	4,120	4,120	0 Ó
Community Relations (subprog 002)	1,000	1,000	0
Hdwr/Sfwr Upgrades & Maint (subprog 004)	4,000	4,000	0
Janitorial Supplies & Misc Expenses (subprog 002)	47,500	47,500	0
Office Equipment Maintenance (subprog 002)	25,300	25,300	0
Safety Incentive Program (subprog 002)	2,500	0	(2,500)
General Office Supplies (subprog 002)	45,000	45,000	0
Computer (software,hardware,network,) (subp	15,000	15,000	0
Vehicle Expense (subprog 007)	7,000	· 0	(7,000)
Awards/Employee Functions (subprog 002)	5,000	5,000	0
Publications (subprog 002)	10,000	10,000	. 0
	295,170	260,670	(34,500)
	\$320,170	\$298,110	(\$22,060)
Projects			
GSU Oil Dryer (subprog 005)	0	40,000	40,000
Bathroom Remodel/Updates (subprog 002)	0	25,000	25,000
Forklift (subprog 002)	0	45,000	45,000
	0	110,000	110,000

# Northern California Power Agency Gas Plants - Shared Projects Detail

			FY 2	2015	Proposed FY 2016	orecast Y 2017	Forecast FY 2018	Fore FY 2	ecast 2019		orecast Y 2020	Forecast FY 2021		orecast 7 2022	Fore FY 2		Forecas FY 2024		recast 2025
Projects	Notes	Total	Buc	lget	Budget														
Operations & Maintenance (O&M)						 													
GSU Oil Dryer	D	\$ 40,000	\$	-	\$ 40,000	\$ -	\$ -	\$	-	\$	-	\$	-		\$	- :	6	- \$	-
Forklift	D	45,000		-	45,000	-	-		-	•	-	•	-		•	- '		- '	-
Bathroom Updates	D	25,000		-	25,000	-	-		-		-		-			· · -		-	-
Total O&M Projects Funding Requirement		\$ 110,000	\$	-	<u>\$ 110,000</u>	\$ 	\$ -	\$	-	\$	-	\$ -	\$	-	\$		<u> </u>	\$	-

Notes: D Discretionary M Mandatory

#### NORTHERN CALIFORNIA POWER AGENCY Generation Services - Shared Comparative Annual Budget Report

				Approved						Proposed		
				FY 2014	F١	Y 2014		FY 2015		FY 2016	lr	ncrease/
				Budget	ŀ	Actual		Budget		Budget	(D	ecrease)
Routine O&M	/ Costs											
Operations			\$	324,692	\$	204,253	\$	300,000	\$	275,000	\$	(25,000)
Administratio	on			140,000		451,368		65,000		65,000		-
Routine O&N	/i w/o Labor		· · ·	464,692		655,621		365,000		340,000		(25,000)
Labor				1,580,779		979,188		1,333,746		1,215,017		(118,729)
Total Routine	e O&M Costs			2,045,471		1,634,809		1,698,746		1,555,017		(143,729)
Occupancy (	Cost			104,150		87,785		155,833		74,027		(81,806)
Annual Bud	get Cost		\$	2,149,621	\$	<b>1,722,59</b> 4		1,854,579		1,629,044		(225,535)
Less Funding	-											
	9 Services Shared - I	Liquidation		(2,149,621)		(1,722,594)		(1,854,579)		(1,629,044)		225,535
		•	\$		\$		\$	-	\$		\$	
Allocated	Person Years FY 16	Allocation										
Hydro	18.72	FY 16 % 21.6%	\$	487,532		349.007	¢	395,418	¢	351,252	¢	(44,166)
CT 1	3.30	3.8%	Ψ	80,734		40,180	φ	69,494	φ	61,919	φ	(7,574)
CT 2	3.09	3.6%		75,786		58,987		65,058		57,979		(7,079)
LEC	20.71	23.9%		510,711		451,379		437,453		388,591		(48,861)
Geo	41.00	47.2%		994,857		823,041		887,156		769,302		(117,854)
	86.82	100.0%	\$		\$	1,722,594	\$	1,854,579	\$	1,629,044	\$	(225,535)
Allocation ba	ased on FTE person			· · · · · · · · · · · · · · · · · · ·			· · · ·	·····		· · · ·	· · · ·	

Allocation based on FTE person years.

3/27/2015

PWRPA<sup>2</sup>

Subtotal Other LEC participants

Subtotal Other participants

Total NCPA and Other

Northern California Power Agency Calculation of JPA Assessment for Fiscal Year 2016 Budget

JP	A Assessment A	mount \$/MWh	\$0.150	
	CY14 Energy			
	Delivered		JPA	Participant
Member	MWh	Share %	Assessment	Revenue Share
Alameda	363,734	4.4434%	\$54,561	\$4,710
BART	371,933	4.5435%	\$55,791	4,816
Biggs	15,447	0.1887%	2,317	200
Gridley	35,777	0.4371%	5,367	463
Healdsburg	78,324	0.9568%	11,749	1,014
Lodi	457,984	5.5947%	68,699	5,930
Lompoc	139,918	1.7092%	20,988	1,812
Palo Alto	978,546	11.9539%	146,785	12,671
Plumas Sierra	159,317	1.9462%	23,898	2,063
Port Of Oakland	81,413	0.9945%	12,212	1,054
Redding	794,743	9.7086%	119,214	10,291
Roseville	1,241,664	15.1682%	186,253	16,078
Santa Clara	3,196,694	39.0508%	479,514	41,394
Truckee Donner	154,874	1.8919%	23,232	2,005
Ukiah	115,618	1.4124%	17,343	1,497
Subtotal NCPA Participants	8,185,986	100.000%	1,227,922	\$106,000
Other participants:	· · · · · · · · · · · · · · · · · · ·			
TID <sup>1</sup>	862,866		8,194	·
Other LEC Participants:			-,	
City of Azusa <sup>2</sup>	n/a		5,486	
CDWR <sup>2</sup>	n/a		65,968	
MID <sup>2</sup>	n/a		21,099	

5,254

97,806

106,000

\$1,333,922

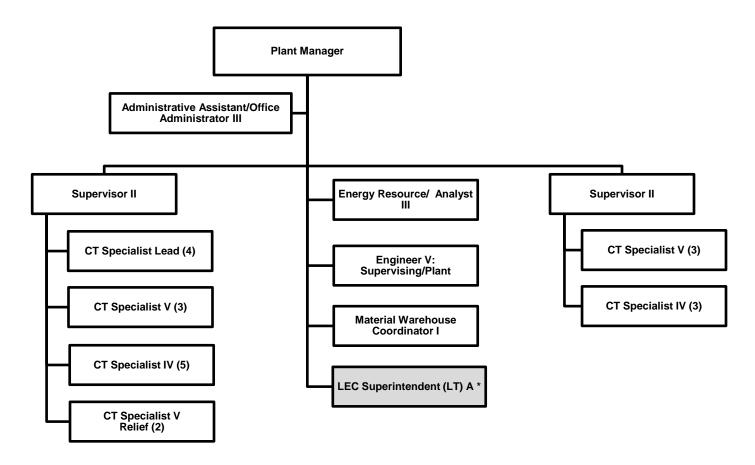
n/a

-

 <sup>1</sup> CY2014 MWH share of Geothermal generation (\$0.150 x 6.3305% x 862,866 Mwh)
 <sup>2</sup> Per LEC Project Management and Operations Agreement, Article 6.2.1.b JPA Cost rate x GES x Annual CY Mwh Generation

Azusa	\$0.150 x 2.7857% x 1,312,804
CDWR	\$0.150 x 33.5000% x 1,312,804
MID	\$0.150 x 10.7143% x 1,312,804
PWRPA	\$0.150 x 2.6679% x 1,312,804

## **Combustion Turbine Facilities and LEC**



\* (LT)-A Position budgeted limited term for Lodi Energy Center, ½ year FY 2013-2014, not budgeted FY 2015-2016.

Northern California Power Agency

Labor Budget Worksheet FY2015-2016

**Generation Services** 

.

\*

Org. 610 - Combustion Turbine and Lodi Energy Center Facilities (CT 1, CT 2 & LEC)

				CT 1			CT 2			LEC		
			Facility Mgmt &			Facility Mgmt &			Facility Mgmt &			
			Admin	Operations	Maintenance	Admin	Operations	Maintenance	Admin	Operations	Maintenance	
	•		546-010-000	548-010-000	553-010-000	546-006-000	548-006-000	553-006-000	546-009-000	548-009-000	553-009-000	
No.	Name	Position	610-010-000	610-010-000	610-010-000	610-010-000	610-010-000	610-010-000	610-010-000	610-010-000	610-010-000	TOTAL
1	DeBortoli, Michael	Manager, Plant	341			341			1,398			2,080
2	Venethongkham, Souriyet	Engineer/Energy Resource III	341			341			1,398			2,080
3	Conrad, Melissa	Administrative Assistant/Office Administrator 111	341			341			1,398			2,080
4	Philpot, Melissa	Material/Warehouse Coordinator I	341			341			I,398		-	2,080
5	Lawson, Jeremy	Engineer V: Supervising/Plant	341			341			1,398			2,080
6	Santana, Rafael	Supervisor II			354	•.		270			1,456	2,080
7	Sexton, Scott	Supervisor II		172			182			1,726		2,080
8	Aistrup, Scott	CT Specialist V		172			182			1,726		2,080
9	Cottrell, Matthew	CT Specialist - Lead		. 172			182			1,726		2,080
10	Dempsey, Mark W.	CT Specialist - Lead		172			182			1,726		2,080
11	Hern, Jeffery	CT Specialist - IV		172			182			1,726		2,080
12	Johnson, Tom	CT Specialist - IV		172			182			1,726		2,080
13	Ropp, Michael	CT Specialist - IV		172			182			1,726		2,080
14	Pacheco, Jeffrey	CT Specialist - Lead		172			182			I,726		2,080
15	McCrea, Travis	CT Specialist IV		172			182			1,726		2,080
16	Quitter, John	CT Specialist V		172			182			1,726		2,080
17	Rusk, Brad	CT Specialist V		172			182			1,726		2,080
18	Stimac, Dennis	CT Specialist IV		172			182			1,726		2,080
19	Wertz, James	CT Specialist - Lead		172			182			1,726		2,080
20	Johnson, Ryan	CT Specialist Lead - Relief		172			182			1,726		2,080
21	Philips, Jaun	CT Specialist Lead - Relief		172			182			1,726		2,080
22	Gibbon, Jeff	CT Specialist IV		· · ·	354			270			1,456	2,080
23	Martin, Joshua	CT Specialist IV			354			270			1,456	2,080
24	Oliveros, Felix	CT Specialist IV			354			270			1,456	2,080
25	Pepiot, Rick L.	CT Specialist V			354			270			1,456	2,080
26	Murphy, Eric	CT Specialist V			354			270			1,456	2,080
27	Turner, Dylan	CT Specialist V			354			270			1,456	2,080
28	Vacant	Superintendent, Generation Resources (LT) (LEC)*										-
		Total Hours	1,705	2,580	2,478	1,705	2,730	1,890	6,990	25,890	10,192	56,160
		Total in Person Years	0.82	1.24	1.19	0.82	1.31	0.91	3,36	12.45	4.90	27.00
		Total Budget S	\$ 168,054	\$ 266,153	\$ 248,299	\$ 168,054	\$ 281,627	\$ 189,381	\$ 688,972	\$ 2,670,810	\$ 1,021,252	\$ 5,702,601

Position budgeted Limited Term for Lodi Energy Center 1/2 year FY 2013-2014, not budgeted FY 2015-2016.

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B

			ICS-A	100.0%
_		Total Iss	ue	
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	4,885,417	16,348,533	(4,519,569)	16,714,381
7/1/2016	5,131,250	16,104,262	(4,519,569)	16,715,943
7/1/2017	5,387,083	15,847,700	(4,519,569)	16,715,214
7/1/2018	5,653,750	15,578,345	(4,519,569)	16,712,527
7/1/2019	5,939,583	15,295,658	(4,519,569)	16,715,672
7/1/2020	6,235,833	14,998,679	(4,519,569)	16,714,943
7/1/2021	6,547,083	14,686,887	(4,519,569)	16,714,402
7/1/2022	6,873,333	14,359,533	(4,519,569)	16,713,297
7/1/2023	7,215,000	14,015,866	(4,519,569)	16,711,297
7/1/2024	7,576,667	13,655,116	(4,519,569)	16,712,214
7/1/2025	7,959,167	13,276,283	(4,519,569)	16,715,881
7/1/2026	8,368,333	12,862,273	(4,501,795)	16,728,811
7/1/2027	8,769,583	12,250,464	(4,287,662)	16,732,385
7/1/2028	9,186,250	11,609,320	(4,063,262)	16,732,308
7/1/2029	9,622,917	10,937,713	(3,828,200)	16,732,430
7/1/2030	10,080,000	10,234,182	(3,581,964)	16,732,218
7/1/2031	10,561,667	9,497,233	(3,324,031)	16,734,868
7/1/2032	11,063,750	8,725,069	(3,053,774)	16,735,045
7/1/2033	11,590,417	7,916,198	(2,770,669)	16,735,946
7/1/2034	12,137,917	7,068,823	(2,474,088)	16,732,652
7/1/2035	12,715,000	6,181,420	(2,163,497)	16,732,923
7/1/2036	13,317,500	5,251,826	(1,838,139)	16,731,187
7/1/2037	13,950,000	4,278,184	(1,497,364)	16,730,820
7/1/2038	14,612,917	3,258,299	(1,140,405)	16,730,811
7/1/2039	15,310,417	2,189,949	(766,482)	16,733,884
7/1/2040	14,643,750	1,070,605	(374,712)	15,339,643
-	\$245,334,583	\$277,498,420	(\$89,381,302)	\$433,451,701

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B AZUSA

ICS-A

4.9936%

Total Issue TOTAL PERIOD INTEREST ENDING INTEREST PRINCIPAL SUBSIDY PROJECT 7/1/2015 243,957 816,376 (225, 688)834,645 7/1/2016 256,233 804,178 (225, 688)834,723 7/1/2017 269,008 791,367 (225,688)834.687 7/1/2018 282.324 777.916 (225.688)834.552 7/1/2019 296,597 763.800 (225, 688)834,709 7/1/2020 311,391 748,970 (225, 688)834.673 7/1/2021 326,933 733,401 (225,688) 834,646 7/1/2022 343,225 717,054 (225,688)834,591 360,286 7/1/2023 699.893 (225, 688)834,491 7/1/2024 378,346 681.878 (225, 688)834,537 7/1/2025 (225, 688)397,447 662,961 834,720 7/1/2026 417.879 642.287 (224,800)835,365 7/1/2027 437,916 611,736 (214, 108)835,544 7/1/2028 458,722 579,720 (202, 902)835,540 7/1/2029 480,527 546.183 (191, 164)835,546 7/1/2030 503,352 511,051 (178,868)835,536 7/1/2031 527,405 474,251 (165, 988)835,668 7/1/2032 552,477 435,693 (152, 492)835,677 7/1/2033 578,776 395,301 (138, 355)835,722 7/1/2034 606.116 352.987 (123, 545)835,557 7/1/2035 634,933 308,674 (108,036)835.571 7/1/2036 665,019 262,254 (91,789)835,484 7/1/2037 696,604 213,634 (74, 772)835,466 7/1/2038 729,707 162,706 (56, 947)835,465 7/1/2039 764,537 109,357 (38, 275)835,619 7/1/2040 731.246 53,461 (18,712)765,996 \$12,250,963 \$13,857,088 (\$4,463,321) \$21,644,730

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B BART

11.8310%

ICS-A

_	Total Issue							
PERIOD			INTEREST	TOTAL				
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT				
7/1/2015	577,993	1,934,193	(534,710)	1,977,477				
7/1/2016	607,078	1,905,293	(534,710)	1,977,661				
7/1/2017	637,345	1,874,940	(534,710)	1,977,575				
7/1/2018	668,895	1,843,072	(534,710)	1,977,257				
7/1/2019	, 702,711	1,809,628	(534,710)	1,977,629				
7/1/2020	737,761	1,774,492	(534,710)	1,977,543				
7/1/2021	774,585	1,737,604	(534,710)	1,977,479				
7/1/2022	813,183	1,698,875	(534,710)	1,977,348				
7/1/2023	853,606	1,658,216	(534,710)	1,977,112				
7/1/2024	896,395	1,615,535	(534,710)	1,977,220				
7/1/2025	941,648	1,570,716	(534,710)	1,977,654				
7/1/2026	990,057	1,521,734	(532,607)	1,979,184				
7/1/2027	1,037,528	1,449,351	(507,273)	1,979,607				
7/1/2028	1,086,824	1,373,497	(480,724)	1,979,597				
7/1/2029	1,138,486	1,294,040	(452,914)	1,979,612				
7/1/2030	1,192,564	1,210,805	(423,782)	1,979,587				
7/1/2031	1,249,550	1,123,617	(393,266)	1,979,900				
7/1/2032	1,308,951	1,032,262	(361,292)	1,979,921				
7/1/2033	1,371,261	936,565	(327,798)	1,980,028				
7/1/2034	1,436,036	836,312	(292,709)	1,979,638				
7/1/2035	1,504,310	731,323	(255,963)	1,979,670				
7/1/2036	1,575,592	<b>621,343</b> .	(217,470)	1,979,465				
7/1/2037	1,650,423	506,151	(177,153)	1,979,421				
7/1/2038	1,728,853	385,489	(134,921)	1,979,420				
7/1/2039	1,811,374	259,093	(90,682)	1,979,784				
7/1/2040	1,732,500	126,663	(44,332)	1,814,831				
=	\$29,025,507	\$32,830,807	(\$10,574,692)	\$51,281,623				

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B BIGGS

		0000		
*			ICS-A	0.4802%
_		Total Is		
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	23,461	78,511	(21,704)	80,268
7/1/2016	24,642	77,338	(21,704)	80,275
7/1/2017	25,870	76,106	(21,704)	80,272
7/1/2018	27,151	74,812	(21,704)	80,259
7/1/2019	28,524	73,454	(21,704)	80,274
7/1/2020	29,946	72,028	(21,704)	80,270
7/1/2021	31,441	70,531	(21,704)	80,268
7/1/2022	33,008	68,959	(21,704)	80,262
7/1/2023	34,649	67,308	(21,704)	80,253
7/1/2024	36,385	65,576	(21,704)	80,257
7/1/2025	38,222	63,757	(21,704)	80,275
7/1/2026	40,187	61,769	(21,619)	80,337
7/1/2027	42,114	58,830	(20,591)	80,354
7/1/2028	44,115	55,752	(19,513)	80,354
7/1/2029	46,212	52,526	(18,384)	80,354
7/1/2030	48,407	49,148	(17,202)	80,353
7/1/2031	50,720	45,609	(15,963)	80,366
7/1/2032	53,132	41,900	(14,665)	80,367
7/1/2033	55,661	38,016	(13,306)	80,371
7/1/2034	58,290	33,947	(11,881)	80,355
7/1/2035	61,061	29,685	(10,390)	80,357
7/1/2036	63,955	25,221	(8,827)	80,348
7/1/2037	66,992	20,545	(7,191)	80,347
7/1/2038	70,176	15,647	(5,477)	80,346
7/1/2039	73,525	10,517	(3,681)	80,361
7/1/2040	70,324	5,141	(1,799)	73,666
	\$1,178,172	\$1,332,632	(\$429,236)	\$2,081,568

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B GRIDLEY

		UNDELI		
			ICS-A	3.5212%
		Total Is	ssue	
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	172,023	575,657	(159,141)	588,539
7/1/2016	180,679	567,056	(159,141)	588,594
7/1/2017	189,687	558,022	(159,141)	588,568
7/1/2018	199,077	548,537	(159,141)	588,474
7/1/2019	209,142	538,584	(159,141)	588,584
7/1/2020	219,573	528,126	(159,141)	588,559
7/1/2021	230,533	517,148	(159,141)	588,540
7/1/2022	242,021	505,621	(159,141)	588,501
7/1/2023	254,051	493,520	(159,141)	588,430
7/1/2024	266,786	480,818	(159,141)	588,463
7/1/2025	280,254	467,478	(159,141)	588,592
7/1/2026	294,662	452,900	(158,515)	589,047
7/1/2027	308,790	431,358	(150,975)	589,173
7/1/2028	323,462	408,782	(143,074)	589,170
7/1/2029	338,838	385,134	(134,797)	589,175
7/1/2030	354,932	360,361	(126,126)	589,167
7/1/2031	371,892	334,412	(117,044)	589,260
7/1/2032	389,572	307,223	(107,528)	589,267
7/1/2033	408,116	278,741	(97,560)	589,298
7/1/2034	427,395	248,904	(87,116)	589,182
7/1/2035	447,715	217,657	(76,180)	589,192
7/1/2036	468,930	184,925	(64,724)	589,131
7/1/2037	491,201	150,641	(52,724)	589,118
7/1/2038	514,543	114,730	(40,155)	589,118
7/1/2039	539,103	77,111	(26,989)	589,226
7/1/2040	515,629	37,698	(13,194)	540,132

\$9,771,145

(\$3,147,253)

\$15,262,499

\$8,638,607

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B HEALDSBURG

		TIEREDODORC	)	
			ICS-A	2.9448%
_		Total I		
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	143,868	481,438	(133,094)	492,212
7/1/2016	151,107	474,245	(133,094)	492,258
7/1/2017	158,641	466,690	(133,094)	492,236
7/1/2018	166,494	458,757	(133,094)	492,157
7/1/2019	174,911	450,433	(133,094)	492,250
7/1/2020	183,635	441,687	(133,094)	492,228
7/1/2021	192,801	432,505	(133,094)	492,213
7/1/2022	202,409	422,865	(133,094)	492,180
7/1/2023	212,470	412,745	(133,094)	492,121
7/1/2024	223,121	402,121	(133,094)	492,148
7/1/2025	234,385	390,965	(133,094)	492,256
7/1/2026	246,434	378,773	(132,571)	492,637
7/1/2027	258,250	360,757	(126,265)	492,742
7/1/2028	270,520	341,876	(119,657)	492,740
7/1/2029	283,380	322,098	(112,734)	492,743
7/1/2030	296,840	301,380	(105,483)	492,737
7/1/2031	311,024	279,678	(97,887)	492,815
7/1/2032	325,810	256,939	(89,929)	492,820
7/1/2033	341,319	233,119	(81,592)	492,847
7/1/2034	357,442	208,166	(72,858)	492,750
7/1/2035	374,436	182,033	(63,712)	492,758
7/1/2036	392,179	154,658	(54,130)	492,707
7/1/2037	410,805	125,986	(44,095)	492,696
7/1/2038	430,327	95,952	(33,583)	492,696
7/1/2039	450,867	64,491	(22,572)	492,786
7/1/2040	431,235	31,528	(11,035)	451,728
	\$7,224,713	\$8,171,886	(\$2,632,137)	\$12,764,462
=	÷,,		(42,002,101)	÷12,101,102

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B LODI

ICS-A

17.0295%

		Total I	ssue	
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	831,960	2,784,066	(769,658)	2,846,368
7/1/2016	873,824	2,742,468	(769,658)	2,846,634
7/1/2017	917,391	2,698,777	(769,658)	2,846,510
7/1/2018	962,803	2,652,907	(769,658)	2,846,052
7/1/2019	1,011,479	2,604,767	(769,658)	2,846,588
7/1/2020	1,061,928	2,554,193	(769,658)	2,846,464
7/1/2021	1,114,933	2,501,097	(769,658)	2,846,371
7/1/2022	1,170,491	2,445,350	(769,658)	2,846,183
7/1/2023	1,228,675	2,386,825	(769,658)	2,845,843
7/1/2024	1,290,265	2,325,392	(769,658)	2,845,999
7/1/2025	1,355,403	2,260,878	(769,658)	2,846,623
7/1/2026	1,425,081	2,190,375	(766,631)	2,848,825
7/1/2027	1,493,412	2,086,187	(730,165)	2,849,434
7/1/2028	1,564,368	1,977,004	(691,951)	2,849,421
7/1/2029	1,638,730	1,862,633	(651,921)	2,849,441
7/1/2030	1,716,569	1,742,825	(609,989)	2,849,405
7/1/2031	1,798,594	1,617,327	(566,064)	2,849,857
7/1/2032	1,884,096	1,485,832	(520,041)	2,849,887
7/1/2033	1,973,785	1,348,085	(471,830)	2,850,040
7/1/2034	2,067,021	1,203,782	(421,324)	2,849,479
7/1/2035	2,165,295	1,052,662	(368,432)	2,849,525
7/1/2036	2,267,898	894,357	(313,025)	2,849,230
7/1/2037	2,375,609	728,551	(254,993)	2,849,167
7/1/2038	2,488,500	554,871	(194,205)	2,849,166
7/1/2039	2,607,280	372,936	(130,528)	2,849,689
7/1/2040	2,493,751	182,318	(63,811)	2,612,257
	\$41,779,139	\$47,256,465	(\$15,221,148)	\$73,814,457
:	÷ ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	+11,200,100	(\$10,221,170)	<i>\\</i> , 0, 017, 707

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B LOMPOC

ICS-A

3.6491% Total Issue PERIOD INTEREST TOTAL ENDING PRINCIPAL INTEREST SUBSIDY PROJECT 7/1/2015 178,276 596,581 (164, 926)609,932 7/1/2016 187,247 587,668 (164, 926)609,989 7/1/2017 609,962 196,582 578.305 (164, 926)7/1/2018 206,313 568,476 (164.926)609.864 7/1/2019 216,744 558,160 (164.926)609,979 227,554 7/1/2020 547,323 (164.926)609.952 7/1/2021 238,912 535,946 (164, 926)609,932 7/1/2022 250,818 524,000 (164, 926)609,892 7/1/2023 263,286 511.459 (164, 926)609,819 276,483 498,295 7/1/2024 (164, 926)609,853 7/1/2025 (164, 926)290,441 484,471 609.986 7/1/2026 305,372 469,363 (164, 277)610,458 7/1/2027 610,589 320,015 447,037 (156, 463)7/1/2028 335,219 (148, 274)423,641 610,586 7/1/2029 351,154 399.133 (139,696)610,590 7/1/2030 367,834 373,460 (130,711)610,583 385,410 346,568 7/1/2031 (121, 299)610,679 7/1/2032 403,732 318,390 610,686 (111, 437)7/1/2033 422,951 288,873 610,719 (101, 106)7/1/2034 442.930 257.951 (90.283)610,598 7/1/2035 463,989 225,569 (78, 949)610,608 7/1/2036 485,975 191.647 (67,076)610,545 7/1/2037 509,055 156,117 (54, 641)610,532 533,246 7/1/2038 118,900 (41, 615)610,531 7/1/2039 558,699 79,914 (27.970)610.643 7/1/2040 39,068 559,766 534,371 (13,674)\$8,952,610 \$10,126,314 (\$3,261,652)\$15,817,273

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B PLUMAS-SIERRA

			ICS-A	1.4084%
_		Total I	ssue	
PERIOD	•		INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	68,807	230,257	(63,655)	235,410
7/1/2016	72,270	226,817	(63,655)	235,432
7/1/2017	75,873	223,203	(63,655)	235,421
7/1/2018	79,629	219,409	(63,655)	235,383
7/1/2019	83,655	215,428	(63,655)	235,428
7/1/2020	87,827	211,245	(63,655)	235,418
7/1/2021	92,211	206,854	(63,655)	235,410
7/1/2022	96,806	202,243	(63,655)	235,394
7/1/2023	101,618	197,403	(63,655)	235;366
7/1/2024	106,712	192,322	(63,655)	235,379
7/1/2025	112,099	186,987	(63,655)	235,431
7/1/2026	117,862	181,156	(63,404)	235,613
7/1/2027	123,513	172,539	(60,389)	235,663
7/1/2028	129,381	163,509	(57,228)	235,662
7/1/2029	135,532	154,050	(53,917)	235,664
7/1/2030	141,969	144,141	(50,449)	235,661
7/1/2031	148,753	133,761	(46,817)	235,698
7/1/2032	155,825	122,886	(43,010)	235,701
7/1/2033	163,242	111,494	(39,023)	235,713
7/1/2034	170,954	99,559	(34,846)	235,667
7/1/2035	179,081	87,061	(30,471)	235,671
7/1/2036	187,567	73,968	(25,889)	235,646
7/1/2037	196,475	60,255	(21,089)	235,641
7/1/2038	205,812	45,891	(16,062)	235,641
7/1/2039	215,636	30,844	(10,795)	235,684
7/1/2040	206,246	15,079	(5,278)	216,047
	\$3,455,355	\$3,908,358	(\$1,258,869)	\$6,104,844
=		+0,000,000	(+1,200,000)	

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B POWER AND WATER RESOURCE

4.7824%

ICS-A

		Total Is	ssue	
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	233,641	781,854	(216,144)	799,350
7/1/2016	245,397	770,172	(216,144)	799,425
7/1/2017	257,632	757,902	(216,144)	799,390
7/1/2018	270,385	745,020	(216,144)	799,261
7/1/2019	284,055	731,501	(216,144)	799,412
7/1/2020	298,223	717,298	(216,144)	799,377
7/1/2021	313,108	702,387	(216,144)	799,351
7/1/2022	328,711	686,732	(216,144)	799,298
7/1/2023	345,051	670,296	(216,144)	799,202
7/1/2024	362,347	653,043	(216,144)	799,246
7/1/2025	380,640	634,926	(216,144)	799,422
7/1/2026	400,208	615,126	(215,294)	800,040
7/1/2027	419,397	585,867	(205,054)	800,211
7/1/2028	439,324	555,205	(194,322)	800,207
7/1/2029	460,207	523,086	(183,080)	800,213
7/1/2030	482,067	489,440	(171,304)	800,203
7/1/2031	505,102	454,196	(158,969)	800,330
7/1/2032	529,114	417,268	(146,044)	800,338
7/1/2033	554,301	, 378,585	(132,505)	800,381
7/1/2034	580,485	338,060	(118,321)	800,224
7/1/2035	608,083	295,621	(103,467)	800,237
7/1/2036	636,897	251,164	(87,907)	800,154
7/1/2037	667,146	204,600	(71,610)	800,136
7/1/2038	698,849	155,825	(54,539)	800,136
7/1/2039	732,207	104,732	(36,656)	800,283
7/1/2040	700,324	51,201	(17,920)	733,604
	\$11,732,902	¢12 071 109	(\$4.074.570)	¢20 720 424
	ψ11,132,902	\$13,271,108	(\$4,274,579)	\$20,729,431

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B SANTA CLARA

			ICS-A	46.1588%
_		Total Is	ssue	
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	2,255,049	7,546,284	(2,086,178)	7,715,155
7/1/2016	2,368,523	7,433,531	(2,086,178)	7,715,876
7/1/2017	2,486,612	7,315,105	(2,086,178)	7,715,539
7/1/2018	2,609,702	7,190,775	(2,086,178)	7,714,299
7/1/2019	2,741,639	7,060,289	(2,086,178)	7,715,751
7/1/2020	2,878,385	6,923,208	(2,086,178)	7,715,414
7/1/2021	3,022,054	6,779,288	(2,086,178)	7,715,164
7/1/2022	3,172,647	6,628,186	(2,086,178)	7,714,655
7/1/2023	3,330,356	6,469,553	(2,086,178)	7,713,731
7/1/2024	3,497,297	6,303,035	(2,086,178)	7,714,155
7/1/2025	3,673,854	6,128,171	(2,086,178)	7,715,847
7/1/2026	3,862,721	5,937,069	(2,077,974)	7,721,815
7/1/2027	4,047,933	5,654,665	(1,979,133)	7,723,465
7/1/2028	4,240,261	5,358,721	(1,875,552)	7,723,430
7/1/2029	4,441,821	5,048,715	(1,767,050)	7,723,486
7/1/2030	4,652,805	4,723,974	(1,653,391)	7,723,388
7/1/2031	4,875,137	4,383,807	(1,534,332)	7,724,611
7/1/2032	5,106,892	4,027,386	(1,409,585)	7,724,693
7/1/2033	5,349,995	3,654,021	(1,278,907)	7,725,109
7/1/2034	5,602,715	3,262,883	(1,142,009)	7,723,588
7/1/2035	5,869,089	2,853,268	(998,644)	7,723,714
7/1/2036	6,147,196	2,424,179	(848,463)	7,722,912
7/1/2037	6,439,150	1,974,758	(691,165)	7,722,743
7/1/2038	6,745,144	1,503,991	(526,397)	7,722,739
7/1/2039	7,067,102	1,010,854	(353,799)	7,724,157
7/1/2040	6,759,377	494,178	(172,962)	7,080,592
-				
-	\$113,243,457	\$128,089,893	(\$41,257,321)	\$200,076,029

à

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE ONE Series A & B UKIAH

1

ICS-A

3.2010%

_		Total I	ssue	
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	156,382	523,316	(144,671)	535,027
7/1/2016	164,251	515,497	(144,671)	535,077
7/1/2017	172,441	507,285	(144,671)	535,054
7/1/2018	180,977	498,663	(144,671)	534,968
7/1/2019	190,126	489,614	(144,671)	535,069
7/1/2020	199,609	480,108	(144,671)	535,045
7/1/2021	209,572	470,127	(144,671)	535,028
7/1/2022	220,015	459,649	(144,671)	534,993
7/1/2023	230,952	448,648	(144,671)	534,929
7/1/2024	242,529	437,100	(144,671)	534,958
7/1/2025	254,773	424,974	(144,671)	535,075
7/1/2026	267,870	411,721	(144,102)	535,489
7/1/2027	280,714	392,137	(137,248)	535,604
7/1/2028	294,052	371,614	(130,065)	535,601
7/1/2029	308,030	350,116	. (122,541)	535,605
7/1/2030	322,661	327,596	(114,659)	535,598
7/1/2031	338,079	304,006	(106,402)	535,683
7/1/2032	354,151 -	279,289	(97,751)	535,689
7/1/2033	371,009	253,397	(88,689)	535,718
7/1/2034	388,535	226,273	(79,196)	535,612
7/1/2035	407,007	197,867	(69,254)	535,621
7/1/2036	426,293	168,111	(58,839)	535,565
7/1/2037	446,539	136,945	(47,931)	535,553
7/1/2038	467,759	104,298	(36,504)	535,553
7/1/2039	490,086	70,100	(24,535)	535,652
7/1/2040	468,746	34,270	(11,995)	491,022
	\$7,853,159	\$8,882,723	(\$2,861,095)	\$13,874,787
:		······································		

#### NORTHERN CALIFORNIA POWER AGENCY DEBT SERVICE REQUIREMENTS LODI ENERGY CENTER - ISSUE TWO Series A & B CDWR

ICS-B

100.0000%

		Total I	ssue	
PERIOD			INTEREST	TOTAL
ENDING	PRINCIPAL	INTEREST	SUBSIDY	PROJECT
7/1/2015	4,177,500	7,235,992	(2,171,759)	9,241,733
7/1/2016	4,387,917	7,027,117	(2,171,759)	9,243,274
7/1/2017	4,596,667	6,815,362	(2,171,759)	9,240,270
7/1/2018	4,744,583	6,669,587	(2,171,759)	9,242,412
7/1/2019	4,980,833	6,432,358	(2,171,759)	9,241,433
7/1/2020	5,222,917	6,184,923	(2,164,723)	9,243,117
7/1/2021	5,381,667	5,938,412	(2,078,444)	9,241,634
7/1/2022	5,582,083	5,632,787	(1,971,475)	9,243,395
7/1/2023	5,787,917	5,315,781	(1,860,523)	9,243,174
7/1/2024	6,003,333	4,987,085	(1,745,480)	9,244,938
7/1/2025	6,223,750	4,646,156	(1,626,154)	9,243,751
7/1/2026	6,450,000	4,292,709	(1,502,448)	9,240,261
7/1/2027	6,690,417	3,926,413	(1,374,245)	9,242,585
7/1/2028	6,936,250	3,546,465	(1,241,263)	9,241,452
7/1/2029	7,192,083	3,152,555	(1,103,394)	9,241,244
7/1/2030	7,457,917	2,744,116	(960,441)	9,241,592
7/1/2031	7,733,750	2,320,581	(812,203)	9,242,128
7/1/2032	8,019,583	1,881,382	(658,484)	9,242,481
7/1/2033	8,315,417	1,425,950	(499,082)	9,242,284
7/1/2034	8,621,667	953,717	(333,801)	9,241,582
7/1/2035	8,172,083	464,093	(162,432)	8,473,744
:	\$132,678,333	\$91,593,539	(\$30,953,387)	\$193,318,486

							and mark	••••		 								
Load	FY	JUL		AUG	SEP		ОСТ		NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	Annual
ON	2016	\$ 45.12	\$	4 <b>6.1</b> 5	\$ 44.66	\$	45. <b>01</b>	\$	45.08	\$ 45.15	\$ 45.35	\$ 44.48	\$ 43.62	\$ 43.65	\$ 40.21	\$	40.77	\$ 44.13
ON	2017	\$ 47.33	\$	51.53	\$ 47.59	\$	48.46	\$	46.60	\$ 49.06	\$ 48.77	\$ 47.66	\$ 46.78	\$ 46.30	\$ 42.70	\$	43.25	\$ 47.22
ON	2018	\$ 51.00	\$	55.44	\$ 51.23	\$	50.39	\$	48.36	\$ 50.66	\$ 51.04	\$ 49.84	\$ 48.92	\$ 48.85	\$ 45.04	\$	45.65	\$ 49.79
ON	2019	\$ 52.97	\$	57.77	\$ 53.43	\$	51.54	\$	49.44	\$ 51.68	\$ 52.97	\$ 51.84	\$ 50.85	\$ 50.60	\$ 46.62	\$.	47.34	\$ 51.52
ON	2020	\$ 54.89	\$	59.70	\$ 55.32	\$	53.38	\$	51.19	\$ 53.58	\$ 55.14	\$ 53.88	\$ 52.72	\$ 52.47	\$ 48.38	\$	49.03	\$ 53.41
ON	2021	\$ 56.80	\$	62.03	\$ 57.42	\$	55.47	\$	53.11	\$ 55.47	\$ 56.66	\$ 55.26	\$ 54.13	\$ 53.66	\$ 49.48	\$	50.22	\$ 55.08
ON	2022	\$ 58.20	\$	63.63	\$ 59.03	\$	56.76	\$	54.40	\$ 56.29	\$ 57.52	\$ 56.14	\$ 55.00	\$ 54.52	\$ 50.27	\$	50.99	\$ 56.17
ON	2023	\$ 59.09	\$	64.71	\$ 59.96	\$ .	57.69	\$	55.27	\$ 57.28	\$ 58.44	\$ 57.03	\$ 55.86	\$ 55.36	\$ 51.06	\$	51.74	\$ 57.07
ON	2024	\$ 60.07	\$	65.69	\$ 60.94	\$	58.61	\$	56.16	\$ 58.19	\$ 59.37	\$ 57.94	\$ 56.81	\$ 56.29	\$ 51.85	\$	52.61	\$ 58.01
ON	2025	\$ <b>61.0</b> 4	\$	66.62	\$ 61.87	\$	59.52	\$	57.04	\$ 59.10	\$ 60.32	\$ 58.86	\$ 57.72	\$ 57.14	\$ 52.68	\$	53.44	\$ 58.92
OFF	2016	\$ 36.41	\$	36.80	\$ 36.17	\$	37.64	\$	36.76	\$ 37.79	\$ 39.64	\$ 39.51	\$ 36.92	\$ 37.09	\$ 33.40	\$	31.74	\$ 36.68
OFF	2017	\$ 36.59	\$	41.44	\$ 38.93	\$	42.48	\$	41.88	\$ 43.08	\$ 43.16	\$ 43.22	\$ 42.28	\$ 39.73	\$ 35.66	\$	32.84	\$ 40.12
OFF	2018	\$ 39.71	\$	44.88	\$ 42.29	\$	44.67	\$	43.92	\$ 44.28	\$ 46.79	\$ 46.41	\$ 43.57	\$ 42.51	\$ 38.09	\$	35.14	\$ 42.70
OFF	2019	\$ 44.67	\$	45.58	\$ 42.94	\$	45.92	.\$.	45.10	\$ 46.21	\$ 48.72	\$ 48.43	\$ 45.35	\$ 44.08	\$ 39.62	\$	36.59	\$ 44.43
OFF	2020	\$ 46.33	\$	47.32	\$ 44.62	\$	47.52	\$	46.78	\$ 47.98	\$ 51.57	\$ 51.18	\$ 47.94	\$ 46.59	\$ 41.92	\$	38.57	\$ 46.53
OFF	2021	\$ 48.83	\$	50.13	\$ 47.09	\$	50.44	\$	49.60	\$ 50.75	\$ 53.01	\$ 52.62	\$ 49.10	\$ 47.60	\$ 42.78	\$	39.34	\$ 48.50
OFF	2022	\$ 50.00	\$	51.39	\$ 48.35	\$	51.67	\$	50.74	\$ 51.56	\$ 53.85	\$ 53.46	\$ 49.88	\$ 48.35	\$ 43.46	\$	39.96	\$ 49.46
OFF	2023	\$ 50.84	\$	52.11	\$ 49.13	\$	52.50	\$	51.56	\$ 52.36	\$ 54.69	\$ 54.31	\$ 50.68	\$ 49.14	\$ 44.10	\$	40.58	\$ 50.25
OFF	2024	\$ 51.64	\$.	52.93	\$ 49.91	\$	53.34	\$	52.38	\$ 53.20	\$ 55.58	\$ 55.17	\$ 51.51	\$ 49.91	\$ 44.80	\$	41.34	\$ 51.00
OFF	2025	\$ 52.43	\$	53.76	\$ 50.76	\$.	54.16	\$	53.22	\$ 54.04	\$ 56.46	\$ 56.06	\$ 52.33	\$ 50.70	\$ 45.51	\$	41.98	\$ 51.79

### Weighted Average Forward Electric Prices For Budget Run FY2016 (v4)

Electric Market Prices - \$/MWh

#### Simple Average Forward Gas Prices For Budget Run FY2016

Natural Gas Prices (\$/MMBtu at PG&E CG)																				
FY		JUL		AUG		SEP	ОСТ		NOV	DEC		JAN		FEB	MAR	APR	MAY	JUN		Annual
2016	\$	3.80 \$	5	3.81	\$	3.79 \$	3.80	\$	3.89 \$	4.05	\$	4.14	\$	4.10	\$ 4.11	\$ 4.03	\$ 4.03	\$ 4.06	\$	3.97
2017	\$	4.15 \$	5	4.15	\$ .	4.14 \$	4.12	\$	4.21 \$	4.35	\$	4.46	\$	4.44	\$ 4.43	\$ 4.28	\$ 4.28	\$ 4.31	\$	4.27
2018	\$	4.40 \$	;	4.41	\$	4.39 \$	4.37	\$	4.55 \$	4.68	\$	4.80	\$	4.77	\$ 4.75	\$ 4.53	\$ 4.53	\$ 4.56	\$	4.56
2019	\$	4.64 \$	;	4.65	\$	4.64 \$	4.62	\$	4.71 \$	4.85	\$	4.95	\$	4.92	\$ 4.90	\$ 4.65	\$ 4.65	\$ 4.68	\$	4.74
2020	\$	4.76 \$	;	4.78	\$	4.76 \$	4.75	\$	4.84 \$	4.99	\$	5.09	\$	5.06	\$ 5.03	\$ 4.76	\$ 4.76	\$ 4.79	\$	4.86
2021	\$	4.87 \$	;	4.89	\$	4.88 \$	4.87	\$	4.97 \$	5.13	۲ <b>\$</b>	5.21	\$	5.17	\$ 5.15	\$ 4.86	\$ 4.86	\$ 4.89	\$	4.98
2022	\$	4.98 \$	5	5.01	\$	5.00 \$	5.00	\$	5.10 \$	5.26	\$	5.34	\$	5.31	\$ 5.28	\$ 4.97	\$ 4.96	\$ 4.99	\$	5.10
2023	\$	5.08 \$	5	5.12	\$	5.12 \$	5.12	\$	5.23 \$	5.39	\$.	5.46	\$	5.42	\$ 5.38	\$ 5.07	\$ 5.05	\$ 5.09	\$	5.21
2024	\$	5.18 \$	5	5.21	\$	5.22 \$	5.23	\$	5.34 S	5.49	\$	5.58	\$	5.54	\$ 5.50	\$ 5.17	\$ 5.16	\$ 5.19	\$	5.32
2025	\$	5.28 \$	5	5.32	\$	5.32 \$	5.33	\$	5.46 \$	5.61	\$	5.68	\$	5.64	\$ 5.61	\$ 5.27	\$ 5.26	\$ 5.29	\$	5.42

### Northem California Power Agency MARKET POWER PURCHASES and SALES - GWh Ten Years - FY2015 to FY2024

#### TOTAL PROJECT ANNUAL CAPACITY FACTOR BY RESOURCE - %

				Annual C	apacity Fa	ctor - FY						
Туре	Resource Name	installed Capacity (MW*)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Hydro	Collierville	246.9	18.5%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%
	NSM ,	6.1	28.9%	33.4%	33.5%	33.5%	33.5%	33,5%	33,5%	33.5%	33.5%	33.4%
Geothermal	Geo	NA **						•				
Gas	CT1_AL1	23.8										
	CT1_AL2	25.4										
	CT1_LD	25.3										
	STIG	49.9	0.8%	0.6%	0.2%	0.2%	0.5%	0.5%	0.2%	0.4%	0.7%	1.1%
	LEC	280	44.9%	40.4%	33,2%	29.5%	24.4%	22.2%	23.5%	23.9%	23.7%	23.6%
WAPA	Western BR	1895.0	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%
Member Contracts	AL-PA_High Winds	30	34%	34%	34%	34%	34%	34%	34%	34%	34%	34%
	PA_Shiloh Wind	25	34%	34%	34%	34%	34%	34%	34%	8%		
	AL_Richmond_LFG	2.5	90%	90%	90%	90%	90%	15%				
hand a strategy and a second	AL_Butte_LFG		88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
	AL-PA_OxMtn_LFG	10.6	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	AL-PA_KellerCanyon_LFG	3.8	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
	AL-PA_SantaCruz_LFG	3.0	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%
	PA_JohnsonCyn_LFG	1.4	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%
	PA_San_Joaquin_LFG	4.1	93%	93%	93%	93%	93%	93%	93%	93%	· 93%	93%
	PA-Brannon Solar	20.0	24%	27%	27%	26%	26%	26%	26%	26%	25%	25%
	PA-Blue Sky Solar 20 MW	20.0			13%	25%	25%	25%	25%	25%	24%	24%
	PA-Elevation Solar 40 MW	40.0			7%	13%	13%	13%	13%	13%	13%	13%
	PA-Frontier Solar 20 MW	20.0			13%	25%	25%	25%	25%	25%	24%	24%
	PO EBMUD 1MW 2012-17	1.0	100%	100%	100%	33%						
	PS_HighSierra1	3.3	96%	96%	97%	97%	98%	97%	97%	97%	97%	98%
	PS_HighSierra2	3.3	83%	84%	85%	87%	88%	87%	86%	86%	87%	88%
1944年1月1日1月1日日	UK_Mendo	3.5	39%	39%	39%	39%	39%	39%	39%	39%	39%	39%
NCPA Contracts	Graeagle	0.44	52%	52%	52%	52%	52%	52%	52%	52%	52%	52%
	SCL_Supply	58.3	20%	20%	20%	17%						
	GR PV Main	1.0	21%	21%	21%	21%	21%	21%	21%	20%	20%	20%
and the second second second	BART PV	2.5	21%	21%	21%	21%	21%	21%	21%	20%	20%	20%

Pmax, if available, for certain units from NCPA MARS system - 2010-01-06.
 Geo Capacity varies base on both normal steam decline as well as maximum steam draw. Units are normally run baseload.

			Gene	eration - GV	Vh						
Туре	Resource Name	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Hydro	Collierville	459.018	493.616	493.616	493.616	493.616	493,616	493.616	493.616	493.617	493.616
No. 1985 No. 1	NSM	19.518	22.602	22.602	22.602	22.602	22,602	22.602	22.602	22.602	22,602
Geothermal	Geo	830,160	853.106	828.072	804.062	778.814	754.200	740.095	737.657	715.373	702.720
Gas	CT1_AL1	-	-	-	-	-	-	-	-	-	-
an an an an tha start a	CT1_AL2	-	-	-	-	-	-	-	-	-	-
	CT1_LD	-	-	-	-	-	-	-	-	-	-
	STIG	4.139	3.155	0.850	0.818	2.773	2.401	0.833	1.918	3.767	5.584
	LEC	1,207.543	1,093.800	899.661	795,996	662.692	603,207	637.248	648.528	644.111	641.141
WAPA	Western BR	2,479.5	3,056.0	3,340.0	3,340.0	3,340.0	3,340.0	3,340.0	3,340.0	3,339,9	3,339,9
Member Contracts	AL-PA_High Winds	87.055	87.169	87.055	87.055	87.055	87.169	87.055	87.055	87.055	87.169
	PA_Shiloh Wind	75.277	75.372	75.277	75.277	75.277	75.372	75.277	11.724	-	-
	AL_Richmond_LFG	19.710	19.764	19.710	19.710	19.710	3,348	-	-	-	-
영제 전문 영화 문문	AL_Butte_LFG	16.644	16.690	16.644	16.644	16.644	16.690	16.644	16.644	16.644	16.690
	AL-PA_OxMtn_LFG	93.031	93.286	93.031	93.031	93.031	93.286	93.031	93.031	93,031	93.286
	AL-PA_KellerCanyon_LFG	28.032	28.109	28.032	28.032	28.032	28,109	28,032	28.032	28.032	28,109
	AL-PA_SantaCruz_LFG	22.776	22.838	22.776	22.776	22.776	22.838	22.776	22.776	22.776	22.838
승규는 것 같은 것 같	PA_JohnsonCyn_LFG	11.414	11.446	11.414	11.414	11.414	11.446	11.414	11.414	11.414	11,446
	PA_San_Joaquin LFG	35.627	35.725	35.627	35.627	35.627	35,725	35.627	35.627	35.627	35,725
	PA-Brannon Solar	44.425	50.403	50,050	49.699	49.351	49,006	48,663	48,322	47,984	47,909
2016년 2017년 1월 18일	PA-Blue Sky Solar 20 MW	-	-	24.349	47.559	47.256	46.955	46,655	46.354	46.056	45,759
꽃을 보자는 것이 많은 것.	PA-Elevation Solar 40 MW	-	-	25.695	49,664	49.324	48,988	48.653	48.321	47.984	47.648
	PA-Frontier Solar 20 MW	-	-	24.349	47.559	47.256	46.955	46.655	46.354	46,056	45.759
	PO EBMUD 1MW 2012-17	8.760	8.784	8,760	2,952						
	PS_HighSierra1	28.076	28.433	28.507	28.584	28,666	28.640	28.534	28.599	28.633	28.693
	PS_HighSierra2	24.541	25.069	25.084	25.747	25.949	25,739	25.314	25.542	25.773	25.996
물건 전에 걸었을 수 없	UK_Mendo	12.093	12.118	12.093	12.093	12,093	12.118	12.093	12.093	12.093	12.118
NCPA Contracts	Graeagle	2.004	2.010	2.004	2.004	2.004	2.010	2.004	2.004	2.004	2.010
2 N N 1	SCL_Supply	87.936	87.936	87.936	66,966	-	-	-	-	-	-
	GR PV Main	1.995	1.989	1.976	1.966	1.956	1.949	1.936	1.926	1.917	1.915
	BART PV	4.987	4.972	4.940	4.915	4,890	4,873	4.840	4.816	4.792	4.788

#### Northern California Power Agency Gas Plant Generation GHG Estimate Ten Years - FY2016 to FY2025

LEC forecasted Generation - Expected Energy in MWh per Fiscal Year per Participant

FY	Biggs	Gridley	Healds	Lodi	Lompoc	Plumas	Ukiah	BART	SVP	Azusa	CDWR	MID	PWRPA	Total
2016	4,301	31,537	26,375	152,522	32,683	12,614	28,669	105,963	413,415	44,724	537,840	172,017	42,833	1,605,494
2017	4,457	32,680	27,331	158,051	33,868	13,072	29,709	109,804	428,401	46,346	557,337	178,253	44,386	1,663,694
2018	4,589	33,646	28,139	162,724	34,869	13,458	30,587	113,051	441,069	47,716	573,818	183,524	45,698	1,712,889
2019	4,274	31,338	26,209	151,559	32,477	12,535	28,488	105,294	410,806	44,442	534,446	170,932	42,563	1,595,362
2020	4,519	33,137	27,713	160,260	34,341	13,254	30,124	111,339	434,389	46,993	565,128	180,745	45,006	1,686,949
2021	4,266	31,276	26,157	151,261	32,413	12,510	28,432	105,087	409,997	44,355	533,395	170,596	42,479	1,592,223
2022	3,597	26,372	22,056	127,544	27,331	10,549	23,974	88,610	345,712	37,400	449,762	143,847	35,818	1,342,572
2023	3,226	23,652	19,781	114,387	24,511	9,460	21,501	79,469	310,050	33,542	403,366	129,008	32,124	1,204,077
2024	2,806	20,573	17,206	99,497	21,321	8,229	18,702	69,124	269,688	29,176	350,856	112,214	27,942	1,047,332
2025	2,285	16,757	14,014	81,042	17,366	6,703	15,233	56,303	219,666	23,764	285,779	91,401	22,759	853,071

#### GHG Estimated Obligations - Allowances (MTs) 0.371

FY	Biggs	Gridley H	lealdsburg	Lodi	Lompoc	Plumas	Ukiah	BART	SVP	Azusa	CDWR	MID	PWRPA	Total
2016	1,596	11,700	9,785	56,586	12,125	4,680	10,636	39,312	153,377	16,593	199,539	63.818	15,891	595,638
2017	1,654	12,124	10,140	58,637	12,565	4,850	11,022	40,737	158,937	17,194	206,772	66,132	16,467	617,230
2018	1,702	12,483	10,440	60,371	12,937	4,993	11,348	41,942	163,637	17,703	212,886	68,087	16.954	635,482
2019	1,586	11,626	9,723	56,229	12,049	4,650	10,569	39,064	152,409	16,488	198,280	63,416	15,791	591,879
2020	1,677	12,294	10,282	59,457	12,741	4,917	11,176	41,307	161,158	17,435	209,662	67.056	16.697	625,858
2021	1,583	11,603	9,704	56,118	12,025	4,641	10,548	38,987	152,109	16,456	197,889	63,291	15,760	590,715
2022	1,334	9,784	8,183	47,319	10,140	3,914	8,894	32,874	128,259	13,875	166,862	53,367	13,289	498.094
2023	1,197	8,775	7,339	42,438	9,094	3,510	7,977	29,483	115,028	12,444	149,649	47,862	11,918	446,713
2024	1,041	7,632	6,383	36,913	7,910	3,053	6,939	25,645	100,054	10,824	130,168	41,632	10,366	388,560
2025	848	6,217	5,199	30,066	6,443	2,487	5,652	20,888	81,496	8,816	106,024	33,910	8,444	316,489

#### GHG Allowances - Allocated or Purchased

FY	Biggs	Gridley Healdsburg	Lodi Lor	mpoc Plumas	Ukiah E	BART SVP	Azusa	CDWR	MID PWRPA	Total
2016			CELECTRE STREET				COLUMN STORE	প্রতি হার বিশ্ব সম্প্রাপ		
2017		강화적값 온 동물을 받게		가방에는 것은 것이 있는 것이 있는 것이 있는 것이 있는 것이 있다. 이 같은 것이 같은 것이 있는 것이 있는 것이 있는 것이 없는 것이 없 같은 것이 같은 것이 같은 것이 없는 것	방 방소가 가 없는데			2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
2018				요즘에도 이 같은 것이 같	. 2012년 1월 18일			. 이 너희 안 안 안 안 안 안 안 안 안 안 안 안 안 안 안 안 안 안		_
2019			이 같은 것을 가지?	그렇는 것을 많은 것 것	영화,			전 옷을 걸 수 있었다.		_
2020					소장 관련 사람들은	전 김 이 환자가 많다.			SSEC. SERVICE	
2021		그 방법이 가슴을 걸렸다.	한 것 같은 것 같은 것을			지방 것은 것에서 문제했다.		신청은 실망하는	홍말 아내는 왜 물었다.	
2022			김 씨는 그 김 씨는 것을 했다.	날 옷은 것이 같은 것 것.					이 생각 것 것 같아요	
2023		· 영화						2 명의 가슴에 바다 것을 것 같은 것을 가슴에 있는 것을	2. 2 2 2 2 2 4	
2024	요즘 영화 알려졌다.			영상 : 영상 : 영상	요구 같은 것이 같은 것이 같다.		영상의 전문 관계	신간 고려가 같	2.1.2.12.19~12.11	-
2025					영영 옷 집 문제 옷을					
	ter i si termini i	e de la companya de l	فللتواسلا تقرفت القرائب فالا	ne statisticki statisticki statisticki s			والمحمد فتستعقب المخاص	a Shekar Market		-

#### Net Short/(Long) GHG Allowances by Member

FY_	Biggs	Gridley	Healds.	Lodi	Lompoc	Plumas	Ukiah	BART	SVP	Azusa	CDWR	MID	PWRPA	Total
2016	1,596	11,700	9,785	56,586	12,125	4,680	10,636	39,312	153,377	16,593	199,539	63,818	15,891	595,638
2017	1,654	12,124	10,140	58,637	12,565	4,850	11,022	40,737	158,937	17,194	206,772	66,132	16,467	617,230
2018	1,702	12,483	10,440	60,371	12,937	4,993	11,348	41,942	163,637	17,703	212,886	68,087	16,954	635,482
2019	1,586	11,626	9,723	56,229	12,049	4,650	10,569	39,064	152,409	16,488	198,280	63,416	15,791	591.879
2020	1,677	12,294	10,282	59,457	12,741	4,917	11,176	41,307	161,158	17,435	209,662	67,056	16,697	625,858
2021	1,583	11,603	9,704	56,118	12,025	4,641	10,548	38,987	152,109	16,456	197,889	63,291	15,760	590,715
2022	1,334	9,784	8,183	47,319	10,140	3,914	8,894	32,874	128,259	13,875	166,862	53,367	13,289	498,094
2023	1,197	8,775	7,339	42,438	9,094	3,510	7,977	29,483	115,028	12,444	149,649	47,862	11,918	446,713
2024	1,041	7,632	6,383	36,913	7,910	3,053	6,939	25,645	100,054	10,824	130,168	41,632	10,366	388,560
2025	848	6,217	5,199	30,066	6,443	2,487	5,652	20,888	81,496	8,816	106,024	33,910	8,444	316,489

#### ESTIMATED COST OF GHG OBLIGATIONS - LEC (by Fiscal Year - in \$)

FY	BIG	GRI	HEA	LOD	LOM	<b>PL</b> Ü	UKI	BART	SVP		Azusa	CDWR	MID	PWRPA	Total
2016	\$ 19,669 \$	5 144,220 S	120,616	\$ 697,497 <b>\$</b>	149,463 \$	57,687 S	131,107	\$ 484,577	\$ 1,890,585	\$	204,528	\$ 2,459,596	\$ 786,652	195.879 S	7,342,077
2017	21,324	156,356	130,765	756,188	162,039	62,541	142,139	525,351	2,049,667	1	221,738	2,666,557	852,844	212.361	7,959,870
2018	23,179	169,957	142,140	821,966	176,134	67,981	154,504	571,050	2,227,961		241,026	2,898,512	927,031	230,834	8,652,275
2019	23,639	173,326	144,957	838,261	179,626	69,329	157,567	582,371	2,272,130		245,805	2,955,975	945,409	235,410	8,823,805
2020	29,550	216,665	181,203	1,047,865	224,541	86,664	196,965	727,990	2,840,264		307.267	3,695,101	1.181.804	294,273	11.030.153
2021	32,796	240,466	201,109	1,162,974	249,207	96,184	218,602	807,961	3.152.271	÷ĝ.	341.021	4.101.013	1,311,626	326,600	12,241,829
2022	31,863	233,629	195,391	1,129,906	242,121	93,449	212,387	784,987	3,062,641		331.324	3,984,406	1,274,332	317,313	11.893.750
2023	30,927	226,761	189,647	1,096,693	235,004	90,702	206,144	761,913	2.972.615		321,585	3,867,285	1,236,873	307,986	11.544.135
2024	28,856	211,581	176,951	1,023,273	219,271	84,630	192,343	710,906	2,773,609	. 1	300.056	3,608,384	1,154,069	287.367	10,771,296
2025	25,191	184,705	154,474	893,293	191,419	73,880	167,911	620,604	2,421,295	÷.,	261,942	3,150,035	1,007,475	250,865	9,403,089

#### Northern California Power Agency Gas Offtake - Fuel Costs Ten Years - FY2015 to FY2024

#### LEC - FUEL OFFTAKE BY MEMBER (TOTAL in 1000 MMBTUs) AMOUNTS in 1000s of MMBTUs; COSTS in \$1000s

	·								•				(1	000s MMBtus)
FY	BI	GR	HE	LD	LO	PS	UK	BART	SVP	Azusa	CDWR	MID	PWRPA	Total
2016	29.463	216.027	180.669	1,044.775	223.879	86.408	196.385	725.844	2,831,891	306.361	3,684.207	1,178.319	293.406	10,997.634
2017	30.531	223.858	187.218	1,082.649	231.995	89.541	203.504	752.156	2,934.548	317.467	3,817.762	1,221.034	304.042	11,396.304
2018	31.433	230.477	192.754	1,114.663	238.855	92.188	209.521	774.397	3,021.322	326.854	3,930.652	1,257.140	313.032	11,733,290
2019	29.277	214.663	179.529	1,038.182	222.466	85.863	195.145	721.263	2,814.019	304.428	3,660.957	1,170.883	291.554	10,928.230
2020	30.957	226.987	189.835	1,097.782	235.237	90.792	206.348	762.670	2,975.567	321.904	3,871.126	1,238,102	308.292	11,555,601
2021	29.219	214.241	179.176	1,036.139	222.028	85.694	194.761	719.844	2,808.482	303.829	3,653.754	1,168.580	290.981	10,906.728
2022	24.638	180.649	151.082	873.679	187.216	72,258	164.224	606.977	2,368.129	256.190	3,080.867	985.353	245.357	9,196,618
2023	22.096	162.014	135.497	783.553	167.903	64.804	147.283	544.363	2,123,841	229.763	2,763.056	883.708	220,046	8,247.927
2024	19.220	140.923	117.858	681.551	146.046	56.368	128.110	473.499	1,847.363	199.852	2,403.365	768.668	191.401	7,174,224
2025	15.655	114.785	95.998	555.136	118.957	45.913	104.348	385.673	1,504.711	162.783	1,957.585	626.094	155,900	5,843,536
	262.489	1,924.623	1,609.617	9,308.109	1,994.581	769.830	1,749.630	6,466.686	25,229.874	2,729.431	32,823.331	10,497.881	2,614.011	97,980.092

#### LEC - FORWARD FUEL PURCHASES BY MEMBER

FY _	Bl	GR	HE	LD	LO	PS	UK	BART	SVP	Azusa	CDWR	MID	PWRPA	Total
2016	17.973	88.079	116.359	739.003	179.277	- ,	142.808		a de la				17 X 94 (14 4 4 1 (1	1,283,500
2017	19.363	118,765	104.783	415.799	163.919	- i-	123.472	an an sean an baran an a		가 전에 관련하는 것이 있었다. 사람이 있는 것이 있는 것이 있다.			가는 것 같은 것 같은 것 같은 것을 가 있다. 같은 것 같은 것 같은 것 같은 것 같은 것 같이 같이 같이 같이 같이 있다.	946.100
2018	10.170	50.213	39.490	210.542	90.986	-	55.599		요즘 집은 다음 물건	: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2:				457.000
2019	3.680	14.720	11.040	92.000	44.160	· -	18.400	전 영상 영상의	이 아이는 것을 하는 것을 것			성 소재 이상 수 있는	이 이야한 물통 관련	184.000
2020	÷			- · ·	-	· · ·	1			2010 - 10 2010 - 10 2010 - 10 2010 2010 - 10 2010 - 10 2010 - 10 2010 - 10 2010 2010 - 10 2010 - 10 2010 - 10 2010 - 10 2010 - 10 2010 - 10 2010	에 가 가는 것은 것이 가 한 것 같다. 같은 것은 것은 것은 것은 것을 하는 것이 같이 같이 같이 있다.		영영, 영영, 영화, 영화, 영화, 영화, 영화, 영화, 영화, 영화,	-
2021	-	· -	· -		and the second second			이 가장 아님 물통	입가 소리 영화		성화가를 보냈다. 문제 같은	영화 영화가 이 수 있는		-
2022		. <del>-</del> .		2 - E	-	:						전 방송 영화 가격하는		-
2023	-		-		-	1.1 <del>-</del> 1.		이가 많을 가 봐야?		1997년 1월 2017년 1월 2017년 1997년 1월 2017년 1월 2017년 1월 2017년 1월 2017년 1월 1월 2017년 1월 2017년 1월 1월 2017년 1월 2				-
2024	-		-				11	성장 영국 것의	전 철호 환경 전 것 :		전문 양양은 고양 글이 같은	이 같은 것이 같은 것이 같아요.		-
2025			-	-	<u>-</u>	<u> </u>		이 나라가지 않는 것이 지하는 것이 있는 것이다.	지 않는 것이라.	아파 가란 가라	2013년 - 1913년 - 1913년 1919년 - 1917년 - 1913년 - 1913년 - 1913년 1919년 - 1917년 - 1913년 - 1		이 같은 것은 것을 하는 것	-
	51.187	271.777	271.673	1,457.343	478.341	-	340.279	-	-	-	-	··· ·· ·	-	2,870.600

#### LEC - NET EXPOSURE BY MEMBER (1000 MMBTUS)

FY	BI	GR	HE	LD	LO	PS	UK	BART	SVP	Azusa	CDWR	MID	PWRPA	Total
2016	11.489	127.947	64.310	305,773	44.602	86.408	53.577	725.844	2,831.891	306.361	3,684.207	1,178.319	293.406	9,714.134
2017	11.168	105.093	82.436	666.850	68.076	89.541	80.032	752.156	2,934.548	317.467	3,817.762	1,221.034	304.042	10,450.204
2018	21.263	180.264	153.264	904.121	147.869	92.188	153.922	774.397	3,021.322	326.854	3,930.652	1,257.140	313.032	11,276,290
2019	25.597	199.943	168.489	946.182	178.306	85.863	176.745	721.263	2,814.019	304.428	3,660.957	1,170.883	291.554	10,744.230
2020	30.957	226.987	189.835	1,097.782	235.237	90.792	206.348	762.670	2,975.567	321.904	3,871.126	1,238.102	308.292	11,555.601
2021	29.219	214.241	179.176	1,036.139	222.028	85.694	194.761	719.844	2,808.482	303.829	3,653.754	1,168.580	290.981	10,906.728
2022	24.638	180.649	151.082	873.679	187.216	72.258	164.224	606.977	2,368.129	256.190	3,080.867	985.353	245.357	9,196.618
2023	22.096	162.014	135.497	783.553	167.903	64.804	147.283	544.363	2,123.841	229.763	2,763.056	883,708	220,046	8,247,927
2024	19.220	140.923	117.858	681.551	146.046	56,368	128.110	473.499	1,847.363	199.852	2,403.365	768.668	191.401	7,174.224
2025	15.655	114.785	95.998	555.136	118.957	45.913	104.348	385.673	1,504.711	162.783	1,957.585	626.094	155.900	5,843.536
TOTAL	211.302	1,652.846	1,337.944	7,850.765	1,516.239	769.830	1,409.352	6,466.686	25,229.874	2,729.431	32,823.331	10,497.881	2,614.011	95,109.492

LEC - EST. COST OF NET EXPOSURE BY MEMBER (\$1000s) (Figured as net cost of exposure plus hedged fuel cost)

FY	BIGGS	GR	DLEY	Н	EALDS	LODI	L	OMPOC	P	LUMAS		UKIAH	•	BART	 SVP	Azusa		CDWR	•	MID	F	WRPA	Total
2016 \$	128.571	\$	908.537	\$	800.320	\$ 4,597.643	\$	997.239	\$	345.023	\$	873.852	\$	2,898.244	\$ 11,307.545	\$ 1,223.279	\$	14,710.786 \$		4,704.949	\$	1,171.549 \$	44,667.537
2017	141.073	1	,020.174		862.706	4,972.150		1,210.087		385.178		937.730		3,235.553	12,623.560	1,365.649		16,422.884		5,252.529		1,307.899	49,737.171
2018	190.535	1	,392.446	1	1,212.731	6,234.450		1,591.678		422.339		1,298.598	1	3,547.712	13,841.453	1,497,403		18,007.327		5,759,281		1,434.082	56,430.035
2019	140.268	1	,024.254		856,175	4,960.795		1,071,441		409.776		932.854		3,442.179	13,429,714	1,452.860		17,471.667		5,587,961		1,391.423	52,171.367
2020	168.724	1	,237.119	1	1,034.638	5,983.115		1,282.087		494.835		1,124.637	1	4,156.690	16,217,391	1,754.438	Aury)	21,098.353		6,747.883		1,680.248	62,980.158
2021	162.710	1	,193.026		997.762	5,769.867		1,236.391		477.198		1,084.553		4,008.539	15,639.377	1,691.907		20,346.374		6.507.378		1.620.361	60,735,445
2022	140.354	1	029.102		860.668	4,977.077		1,066.509		411.630		935.533		3,457.759	13,490.498	1,459.436		17,550.744	1.	5,613.252	12.26	1,397,720	52,390.282
2023	128.594		942.877		788.555	4,560.064		977.150		377.141		857.148		3,168.045	12,360.174	1,337.155		16,080.227		5,142.936		1,280.610	48,000.676
2024	113.782		834.275		697.728	4,034.827		864.600		333.701		758.420		2,803.143	10,936.505	1,183.139		14,228.074		4,550.563		1,133.107	42,471.863
2025	94.316		691.547		578.361	3,344.550		716.684		276.612	•	628.670		2,323.582	9,065.490	980,728		11,793.938		3,772.053		939.255	35,205.785
TOTAL <u>\$</u>	1,408.9	\$	10,273.4	\$	8,689.6	\$ 49,434.5	\$	11,013.9	\$	3,933.4	\$	9,432.0	\$	33,041.4	\$ 128,911.7	\$ 13,946.0	\$	167,710.4 \$		53,638.8	\$	13,356.3 \$	504,790.3

NUCLEAR STREET IN STREET, INSPECT