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Minutes

Date: January 10, 2019

To: NCPA Facilities Committee

From: Carrie Pollo

Subject: January 3, 2019 Facilities Committee Meeting Minutes

 Call meeting to order & Roll Call - The meeting was called to order by Committee Chair Tikan Sigh at 9:04 am. A sign-in sheet was passed around. Attending via teleconference and/or online presentation were James Dorrance and Vidhi Chawla (Alameda), Mark Sorensen (Biggs), Paul Eckert (Gridley), Terry Crowley (Healdsburg), Poorvi Rao (Palo Alto), Jared Carpenter (Port of Oakland), Brian Schinstock (Redding), and Steve Hance (Santa Clara). Those attending in person are listed on the attached Attendee Sign-in Sheet. Committee Representatives from BART, Plumas-Sierra, TID, and Ukiah were absent. A quorum of the Committee was established.

PUBLIC FORUM

No public comment.

2. Approve minutes from the December 5, 2018 Facilities Committee meetings.

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending approval of the December 5, 2018 Facilities Committee meeting minutes. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Port of Oakland, Redding, Roseville, and Santa Clara. The motion passed.

3. All Generation Services Facilities, Members, SCPPA – Schneider Electric USA, Inc. MTGSA – Staff presented background information, and was seeking a recommendation for Commission approval of a five-year Multi-Task General Services Agreement with Schneider Electric USA, Inc. for electrical related services, with a not to exceed amount of \$2,000,000, for use at all facilities owned and/or operated by NCPA, its Members, SCPPA, and SCPPA Members. All purchase orders issued pursuant to the agreement will be charged against approved Annual Operating Budgets. A draft Commission Staff Report and the draft agreement were available for review. This is an enabling agreement with no commitment of funds. Randy Howard expressed concern that there was already an existing agreement with this vendor. After discussion with the Committee, it was decided to combine this agreement with the other existing agreement and enter into a new agreement to cover all the work under one agreement.

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending Commission approval authorizing the General Manager or his designee to combine existing agreements and to enter into a new Multi-Task General Services Agreement with Schneider Electric USA, Inc. for electrical related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$2,000,000.00 over five years, for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority ("SCPPA"), or by SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Port of Oakland, Redding, Roseville, and Santa Clara. The motion passed.

4. All Generation Services Facilities, Members, SCPPA – Irani Engineering, Inc. MTCSA – Staff gave background information and was seeking a recommendation for Commission approval of a five-year Multi-Task Consulting Services Agreement with Irani Engineering, Inc. for injection well-related consulting services, with a not to exceed amount of \$2,000,000, for use at all facilities owned and/or operated by NCPA, its Members, SCPPA, and SCPPA Members. All purchase orders issued pursuant to the agreement will be charged against approved Annual Operating Budgets. A draft Commission Staff Report and the draft agreement were available for review. This is a renewal of an existing agreement for well work, and is an enabling agreement with no commitment of funds.

Motion: A motion was made by Jiayo Chiang and seconded by Brian Zard recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task Consulting Services Agreement with Irani Engineering, Inc. for injection well-related consulting services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$2,000,000.00 over five years, for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority ("SCPPA"), or by SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Port of Oakland, Redding, Roseville, and Santa Clara. The motion passed.

5. NCPA CT Facilities – CT2 Maintenance Work – Staff reviewed the list of STIG maintenance items, and was seeking a recommendation for Commission approval of the recommended maintenance work for CT2, including authorizing use of Maintenance Reserve Funds for required work, with a not to exceed amount of \$363,000, for use at NCPA CT2 Facility only. Of the items listed for maintenance work, it is recommended to defer fixing the gas compressor, as well as defer working on the boiler. Both these items can be used on a limited basis to defer the maintenance. It is recommended to work on the chiller, expansion joints, chemical pumps and the penetration seals due to safety and environmental issues.

The total cost of maintenance for the recommended items is \$330,000 with a 10% contingency amount totaling \$363,000. This project will be funded by the maintenance reserve account, which will be replenished in FY2020.

Motion: A motion was made by Brian Zard and seconded by Tikan Singh recommending Commission approval supporting staff's maintenance recommendations for CT2, including authorization for NCPA to use Maintenance Reserve Funds for maintenance activities, and granting authority to the General Manager or his designee to enter into agreements and to issue purchase orders for the required maintenance work, which shall not exceed \$363,000, for use at NCPA CT2 facility only. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Redding, and Roseville. ABSTAIN = Palo Alto, Port of Oakland, and Santa Clara. The motion passed.

6. NCPA CT Facilities – CT1 Lodi Turbine Maintenance Work – Staff provided background information for the CT1 Lodi recommended maintenance and was seeking a recommendation for Commission approval of the maintenance work discussed. In June 2018 the ratcheting system was not functioning properly. It was fixed at that time and adjusted to the right settings. It started acting up again this past November, then the turbine locked up in December and would not start. A new borescope was done finding a setting in the second stage nozzle was not correct. The clearance was too tight and melted the seal and rotor. The stage two nozzle is under warranty with Ethos.

Error number two is that the nozzle retaining blocks were installed in the wrong place. This is causing 1st stage nozzle cracking, as well as cracking on the 1st stage buckets and blades. The shroud is cooked and burned with the flex seal unable to get too. It is recommended to remove the exhaust section and the lower bearing rotor, to fix these problems. There has been lots of erosion since 2016. Ethos just began talking regarding the 1st stage warranty. This is an unexpected outage and should be completed by February 13, 2019, with six 12 hour shifts for all the repairs. Other maintenance will be performed during the outage including ice blast, polishing the compressor, blending blades, check shims, eddy current test blades, inspect bearings, and check the alignment. A Sulzer representative will be onsite to monitor the progress, with additional lab and examination of failed components.

Motion: A motion was made by Jiayo Chiang and seconded by Tikan Singh recommending Commission approval authorizing the General Manager or his designee to enter into agreements and issue purchase orders necessary to restore Lodi CT to service, for a total cost not to exceed \$1,500,000, and to increase the CT1 FY19 budget by \$1,500.000. Estimated schedule to return to service is 2/13/2019. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Roseville, and Santa Clara. ABSTAIN = Palo Alto, Port of Oakland, and Redding. The motion passed.

7. All Generation Services Facilities, Members, SCPPA – Pullman Heating and Cooling MTGSA – Staff provided background information and was seeking a recommendation for Commission approval of a five-year Multi-Task General Services Agreement with Pullman Heating and Cooling for heating, ventilation and HVAC services, with a not to exceed amount of \$500,000, for use at all facilities owned and/or operated by NCPA, its Members, SCPPA, and SCPPA Members. All purchase orders issued pursuant to the agreement will be charged against approved Annual Operating Budgets. A draft Commission Staff Report and the draft agreement were available for review. This is an enabling agreement with no commitment of funds.

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Pullman Heating & Cooling, Inc. for maintenance to include but limited to heating, ventilation and air-conditioning ("HVAC") services and other necessary services with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$500,000 over five years for use at all facilities owned and/or operated by NCPA, its Members, by the Southern California Public Power Authority (SCPPA), or by SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Port of Oakland, Redding, Roseville, and Santa Clara. The motion passed.

8. NCPA Geothermal Facility – Geothermal Plant 1 Overhaul Project – Staff reviewed the overhaul project and was seeking a recommendation for Commission approval of the Geothermal Plant 1 Overhaul Project, and authorizing the General Manager or his designee to enter into agreements and to issue purchase orders for the Project. All purchase orders issued pursuant to the agreement will be issued in accordance with NCPA Purchasing Policies and Procedures.

Total cost for the 2019 Plant #1 Overhaul Project is estimated at \$4,800,000, broken down as Units 1 & 2 overhaul being \$3,700,000, steam ejector upgrade at \$300,000, and a ball cleaning system upgrade at \$800,000. The overhaul schedule is planned for Unit 2 to be out of service from April 1 – May 10, 2019, and Unit 1 out April 22 – May 26, including a three week overlap.

The scope of work for the project includes the following:

- Pull, inspect, and clean Unit #1 & #2 turbine & diaphragms.
- Inspect Unit #2 generator (10 year cycle)
- Upgrade Siemens T-3000 control system software
- Install new steam ejectors
- Install new ball cleaning systems
- Install new 2.4 V and 480 V transformers
- Clean the cooling tower basin and structure
- Clean Unit #1 and #2 condensers
- Clean and repair tanks in Stretford
- Maintenance on BOP items, i.e. pumps, motors, instrumentation.

Funding for this project will come from the FY 2019 reserve account at \$3,700,000. The additional funding of \$1,100,000 will come from a reprioritization of work within the current FY 2019 budget, which will be a budget augmentation. The Geo budget is a very tight budget this year. Staff recommended keeping the effluent revenue.

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending Commission approval authorizing the General Manager or his designee to enter into agreements and issue purchase orders necessary for maintenance work and projects related to the 2019 Plant #1 Overhaul, for a total cost not to exceed \$4,800,000. A vote was taken by roll call: YES = Alameda, Biggs, Gridley Healdsburg, Lodi, Lompoc, Roseville, and Santa Clara. ABSTAIN = Palo Alto, Port of Oakland, and Redding. The motion passed.

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

<u>Solar Project</u> – The Ukiah site is now in the works. Healdsburg is conducting site control. Alameda, Lodi, and Redding are in Phase 2C, which should be completed by the end of March. NCPA has received proposals for CEQA work. Phase 3 is currently in draft. The project is 3 - 6 months behind schedule, with construction scheduled to start by the end of 2019.

Geo – There were no safety incidents at the Geo facilities the past month. Geo conducted an audit at LEC, December 11, 2018. Next Hydro will conduct the Geo audit on January 18. The Net generation of the Geo facilities for 2018 was 1% over the forecasted amount. The main breaker overheated at the Bear Canyon #1 Pump Station. The SEGEP was down for eight days. The breaker was replaced on December 21. The turbine generator bid walk will be late in the week of January 7. Potential bidders include Ethos, Unico Mechanical, Reliable Turbine Services, and Fuji Electric. Bids are due January 31. Meetings are set up with the contractors a week ahead for safety orientations and other items. Ethos has done 4 – 5 overhauls in the past. Plant overhauls will begin April 1st for nine weeks total, with a three-week overlap of the unit outages. There will be a drilling contractor bid walk on January 17 for the P-Site Well workovers. Potentials bidders include Paul Graham Drilling, Kenai Drilling, Barbour Well Drilling, and Nabors Drilling. Bids are due February 7. Site preparation and enabling agreements need to be in place before mobilizing the drill in April or May.

Hydro – The Collierville Unit 2 generator rewind has now been completed, as scheduled just before Christmas, on December 21. There were some alignment issues with the bearings all lining up, but overall staff is very pleased with the rewind. The contractor even stated it's been the smoothest rewind he's ever seen. This generator should now be operational for another 30 years. The Unit 1 generator rewind is scheduled to begin this summer. Post discussions are scheduled to discuss what went right, things that went wrong, what the team learned, and what improvements can be made for the next rewind. The scope of work may be tweaked slightly for the next time. Hydrology is currently below normal with only 2.2 inches of precipitation in

December. New Spicer is lower than normal right now as well. However, a storm is forecasted for this weekend, which may bring precipitation closer to normal.

10. Nexant Cost Allocation Model Billing Determinants – Staff reviewed the billing determinants that will be used in the FY2020 Nexant Cost Allocation Model. The calendar year 2018 data model results still need to be finalized. Staff identified and reviewed the source of changes to members' costs from the change in determinants. The final version of the Nexant Cost Allocation Model and associated underlying operational data are scheduled to be finalized by January 15, 2019, and published to NCPA Connect for member review and feedback.

Staff is recommending two modifications to the current Nexant Cost Allocation Model. The first proposed modification is to exclude system-generated real-time balancing schedules as determinants in the Nexant model. During CY 2018, NCPA Information Services staff deployed three scheduling provisions to facilitate resource and portfolio balancing for SVP for use with the NCPA scheduling suite. These scheduling provisions (RT Adjustment, Grizzly Entitlement, and Gross Load) are automatically generated and do not require or reflect any incremental time on the part of NCPA dispatch staff.

The second modification is to prorate Seattle City Light (SCL) Agreement resource parameter values to reflect end of operations prior to the end of a calendar year. The SCL Agreement ended April 2018. In contrast, the use of related fixed parameter values such as 'Maximum Operating Capacity' in the Nexant Model implicitly presumes that resources exist for a full year. Staff recommends that applicable parameter values be prorated for the SCL agreement as well as other resources on a prospective basis to reflect situations in which a supply resource's operations are discontinued prior to the end of a calendar year.

The initial allocated results for FY 2020 indicate increases to both BART and Port of Oakland by approximately 22% and 16%, respectively, compared to the current fiscal year. Other members' amounts are either decreasing or slightly increasing. Staff reviewed the underlying operational data and provided analysis regarding the cost drivers that resulted in the relative percentage change in allocations to members.

The final proposed modifications for the FY 2020 Nexant Cost Allocation Model determinants results will be presented at the next Facilities Committee meeting February 6 and will be recommended for Commission approval at that time.

11. Scheduling Coordination Program Agreement Appendix B - Staff reviewed the updates to Appendix B, including major revisions to CRR allocations based on CAISO CRR methodology changes, and minor updates to interest allocations. The CAISO pays more money to CRR holders than it collects through the day ahead market, resulting in CRR revenue insufficiency. \$100,000,000 was allocated alone to demand in 2017. Due to the CAISO's new CRR settlement design, modifications to NCPA's allocation process are necessary.

Major revision modifications to Appendix B include changes to these CRR allocation charge codes: 1) 6700 – Congestion Revenue Rights Daily Settlement; 2) 6701 – CRR Monthly True-Up; 3) 4562 – GMC CRR Services Charge; 4) 6706 – CRR Balancing Account Monthly True-Up; and 5) 6790 – CRR Balancing Account.

In addition, charge code 7896 related to Monthly CPM (Capacity Procurement Mechanism) Allocation has been modified to add several allocation cases to account for charges associated with resource capacity deficiency events for which the CAISO must procure backstop capacity to maintain grid reliability.

Minor revision modifications to the interest allocations include changes to these charge codes:

- 1) 7989 Invoice Deviation Interest Distribution; and
- 2) 7999 Invoice Deviation Interest Allocation.

A redline version of the Scheduling Coordination Program Agreement was available for the Committee to review.

Motion: A motion was made by Jiayo Chiang and seconded by Tikan Singh recommending Commission approval of the proposed changes to the settlements charge codes in the Scheduling Coordination Program Agreement Appendix B related to: 1) Implementation for CAISO's redesigned settlements for Congestion Revenue Rights (CRR); 2) Modification to account for allocation for various types of deficient Resource Adequacy procurement as part of CAISO's Capacity Procurement Mechanism allocation; and 3) Clarification for the allocation of invoice deviation interest amounts to NCPA members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Port of Oakland, Redding, Roseville, and Santa Clara. The motion passed.

12. NCPA Authority to Procure Short-Term Resource Adequacy Capacity – Staff presented background information, with a possible solution and proposed criteria, and asked for feedback on a new Appendix I to the Amended and Restated Scheduling Coordination Program Agreement (SCPA), under which NCPA may be authorized to procure Resource Adequacy capacity on behalf of the participating members.

Any scheduled or forced outages that conflict with Resource Adequacy capacity need to have replacement RA capacity secured. Pursuant to the CAISO Tariff, the CAISO may reject outages without substitute Resource Adequacy. This requirement is now being actively enforced by the CAISO. A possible solution to this challenge may be to enable NCPA staff to acquire replacement Resource Adequacy capacity on behalf of the Project Participants under the authority provided in the Scheduling Coordination Program Agreement (SCPA).

Staff has proposed certain criteria for consideration beginning with the option that NCPA will be authorized to procure replacement RA for outages of one month or less. Replacement capacity will be procured based on standard WSPP terms. Maximum rate for replacement capacity for planned outages will not exceed CPM soft cap rate at \$6.31/kW-month. The maximum rate for Forced outages replacement capacity will not exceed the RAAIM penalty rate of \$3.79/kW-month. Cost allocation will be allocated to project participants who committed RA, but were not able to provide replacement capacity. Another option brought up during the meeting to consider is if the outage is shorter than planned, can the RA be sold to others?

General feedback of the Committee during the meeting is that they would like to deal with procuring the RA first before authorizing NCPA to do this on their behalf. Please send further feedback on the criteria presented at this meeting. Based on member feedback, NCPA staff will develop and present a new draft of Appendix I for consideration at the next Facilities Committee meeting. Then will move forward to seek approval.

13. NCPA NDA for Confidential Information and License to Use Intellectual Property – Staff presented background information, and was seeking a recommendation for approval of the updated NCPA Agreement Regarding the Use and Non-Disclosure of Confidential Information and License to Use Intellectual Property (NCPA NDA). The original Non-Disclosure Agreement (NDA) was adopted by the NCPA Commission in 2013. This agreement is applicable to confidential information distributed through the NCPA data portal. This was developed to ensure recipients of data understand requirements to maintain and manage data appropriately. Many members and customers have executed the NDA and currently have access to confidential information.

Since the NDA was implemented, NCPA has developed additional tools/electronic media through which Confidential Information may be shared with members/customers. NCPA has also developed various software applications that are now available for member/customer use. To ensure NCPA continues to protect sensitive data distributed using new electronic media, NCPA has developed a revised NDA. The Amended and Restated NDA now includes language that addresses use of NCPA intellectual property. Pending Commission approval, NCPA staff will work with members/customers to execute the Amended and Restated NDA. This will enable NCPA to continue to roll out new tools/systems for sharing information with members/customers.

Motion: A motion was made by Brian Zard and seconded by Jiayo Chiang recommending Commission approval of the Agreement Regarding the Use and Non-Disclosure of Confidential Information and License to Use Intellectual Property (Amended and Restated NDA), and authorize the General Manager of NCPA, acting on behalf of NCPA, to execute the Amended and Restated NDA with NCPA members and customers upon request. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Port of Oakland, Redding, Roseville, and Santa Clara. The motion passed.

14. Planning and Operations Update -

- San Jose Clean Energy is scheduled to change to full integration, February 1, 2019, going from 105,000 MW to 4,000,000 MW per year.
- Staff is still actively working to transition the CCA customers to their own Scheduling Coordinator IDs. Pioneer Community Energy is now scheduled for this February 1, and San Jose Clean Energy and East Bay Community Energy for March 1. The goal is to complete this transition by the end of Q1 2019.
- NCPA has sent a proposed draft services agreement to SFWPA. They have sent initial comments and are in active discussions to formalize the Agreement.
- Mercuria has completed the administrative process for the STIG natural gas pipeline that runs from Canada to California to continue service on the four segments that NCPA owns. The Mercuria bankruptcy has not impacted this service yet. Any termination of the agreement requires a six-month notice.
- A meeting has been scheduled for January 9, with PG&E, CDWR, and Santa Clara to discuss the Co-Tenancy Agreement. NCPA is proposing that PG&E take over the whole 230kV line.
- **15. Schedule next meeting date –** The next regular Facilities Committee meeting is scheduled for February 6, 2019.

ADJOURNMENT

The meeting was adjourned by the Committee Chair at 12:16 pm.