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Minutes

Date:	May 11, 2022
То:	NCPA Facilities Committee
From:	Carrie Pollo
Subject:	May 4, 2022 Facilities Committee Meeting Minutes

1. Call Meeting to Order & Roll Call – The meeting was called to order by Committee Chair Jiayo Chiang, (Lodi) at 9:05 am. A sign-in sheet was passed around. Attending via teleconference and/or on-line presentation were Alan Harbottle (Alameda), Mark Sorensen (Biggs), Cliff Wagner (Gridley), Melissa Price (Lodi), Shiva Swaminathan (Palo Alto), Mike Brozo (Plumas-Sierra), Khaly Nguyen (Port of Oakland), Nick Rossow (Redding), Ryley Kelly (Roseville), Basil Wong and Steve Hance (Santa Clara), and Willie Manuel and Owen Goldstrom (TID). Those attending in person are listed on the attached Attendee Sign-in Sheet. Committee Representatives from BART, Healdsburg, Lompoc, and Ukiah were absent. A quorum of the Committee was established.

PUBLIC FORUM

No public comment.

2. Approval of Minutes from the April 6, 2022 Facilities Committee meeting.

Motion: A motion was made by Cliff Wagner and seconded by Jiayo Chiang recommending approval of the April 6, 2022 Facilities Committee meeting minutes. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Plumas-Sierra, Port of Oakland, Redding, Roseville, and Santa Clara. The motion passed.

3. All NCPA Facilities, Members, SCPPA – Kinectrics AES, Inc. MTPSA – Staff presented background information and was seeking a recommendation for Commission approval of a five-year Multi-Task Professional Services Agreement with Kinectrics AES, Inc. for generator testing and assessment services, with a not to exceed amount of \$1,000,000, for use at all facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members. All purchase orders will be issued following NCPA procurement policies and procedures.

NCPA currently has an agreement in place with Kinectrics, Inc., which is expiring. NCPA has utilized this vendor in the past for services such as quality control testing on stator bars used in the Hydro generator rewind project. NCPA has a good working relationship with the vendor and wishes to continue that relationship. This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful

bidder on future projects. NCPA has agreements in place for similar services with Ethos Energy, Andritz Hydro, and Sulzer Turbo Services. A draft Commission Staff Report and the draft agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

Motion: A motion was made by Basil Wong and seconded by Mike Brozo recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task Professional Services Agreement with Kinectrics, Inc. for generator testing and assessment services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Plumas-Sierra, Port of Oakland, Roseville, and Santa Clara. ABSTAIN = Redding. The motion passed.

4. NCPA Geothermal Facility – GeothermEx, Inc. First Amendment to CSA – Staff presented background information and was seeking a recommendation for Commission approval of a First Amendment to the five-year Consulting Services Agreement with GeothermEx, Inc., increasing the not to exceed amount from \$225,000 to \$1,000,000, with no other changes to the contract terms and conditions, for continued use NCPA's Geothermal facility. All purchase orders will be issued following NCPA procurement policies and procedures.

NCPA entered into a five-year Consulting Services Agreement with GeothermEx, Inc. effective February 24, 2020, for an amount not to exceed \$225,000, for use at the Geothermal Facility. NCPA will be working with GeothermEx, Inc. to upgrade to a new software platform. GeothermEx, Inc. will also continue to provide NCPA with ongoing modeling support which provides staff with critical geothermal reservoir data used in operational decision making. There are not enough funds remaining on the agreement for this and future work. NCPA now desires to enter into a First Amendment to the Consulting Services Agreement to increase the not-to-exceed amount from \$225,000 to \$1,000,000 to ensure there are sufficient funds for the work detailed above, as well as through the remaining contract term. This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA does not have any agreements in place for similar services with additional vendors at this time. A draft Commission Staff Report and the draft agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

Motion: A motion was made by Basil Wong and seconded by Mark Sorensen recommending Commission approval authorizing the General Manager or his designee to enter into a First Amendment to the Consulting Services Agreement with GeothermEx, Inc. for geothermal reservoir numerical simulations, with any non-substantial changes recommended and approved by the NCPA General Counsel, increasing the not-to-exceed amount from \$225,000 to \$1,000,000, for continued use at the Geothermal Facility. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Port of Oakland, Roseville and Santa Clara. ABSTAIN = Palo Alto and Redding. The motion passed.

5. NCPA Geothermal Facility – Steam Field Operations Forecast Report – Staff was seeking a recommendation for Commission approval of the 2022 Steam Field Operations Forecast Report, including approval regarding the market power price at which to curtail the load at the NCPA Geothermal facilities, as the Geothermal Operating Protocol effective July 1, 2022, and remaining in effect until replaced by the Commission.

No action was taken on this item. After discussion regarding the operating protocol it was decided to update the protocol information and bring this item back next month to seek a recommendation for Commission approval.

6. NCPA 2022 Wildfire Mitigation Plan – Staff presented background information and was seeking a recommendation for Commission approval of the NCPA 2022 Wildfire Mitigation Plan, with updated revisions based on the qualified independent evaluator's recommendations.

Public Utilities Code, Division 4.1, Chapter 6 Wildfire Mitigation, Code 8387 requires electric utilities to assess the risk of catastrophic wildfire posed by a utility's overhead electrical lines and equipment. In response to this requirement, NCPA created its Wildfire Mitigation Plan, to reduce the risk of NCPA facilities igniting wildfire, including identifying preventative maintenance procedures and practices. The NCPA Wildfire Mitigation Plan was approved in the December 5, 2019 Commission Meeting.

NCPA contracted with Dudek, a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure, to complete the annual review and assess the comprehensiveness of the Wildfire Mitigation Plan. The independent evaluator issued a report stating that NCPA's Wildfire Mitigation Plan appropriately addressed all elements required under CPUC Section 8387 (b) (2). The independent evaluation and report were completed April 14 2022.

Work associated with this Project is categorically exempt under Class 1, 3, 4, and 11 Exemptions under CEQA guidelines 15301(b), 15303, 15304, and 15311 and is therefore categorically exempt from CEQA. Class 1 is the "existing facilities" exemption, which includes the repair, maintenance, or minor alteration of existing public structures, facilities, mechanical equipment, involving negligible or no expansion of use. Class 3 is installation of small new equipment and facilities in small structures; Class 4 is minor alterations in the condition of the land; and, Class 11 is construction or placement of minor structures accessory to existing facilities. All necessary Federal, State and County notifications will be made before commencing the work.

A Notice of Exemption was approved by the NCPA Commission on September 27, 2013, for this class of work and was filed in Lake and Sonoma Counties, and in Alpine, Calaveras, San Joaquin, and Tuolumne Counties.

Motion: A motion was made by Mike Brozo and seconded by Mark Sorensen recommending Commission approval of the NCPA 2022 Wildfire Mitigation Plan, with updated revisions based on the qualified independent evaluator's recommendations. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Plumas-Sierra, Port of Oakland, Redding, Roseville, Santa Clara, and TID. The motion passed.

7. All NCPA Facilities, Members, SCPPA – Parker Landscape Development, Inc. First Amendment to MTGSA – Staff presented background information and was seeking a recommendation for Commission approval of a First Amendment to the Multi-Task General Services Agreement with Parker Landscape Development, Inc. for professional commercial landscape services, tree care, and special projects increasing the not to exceed amount to \$300,000 for continued use at NCPA all facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members. All purchase orders will be issued following NCPA procurement policies and procedures.

Parker Landscape Development, Inc. is a commercial landscape company with over 40 years of experience in landscaping design, construction, and maintenance. Parker Landscaping is responsive and works well with the Agency in providing landscape services, maintenance recommendations, resolving issues, and water-saving recommendations.

On April 3, 2018, NCPA entered into a five-year Multi-Task General Services Agreement with Parker Landscape Development, for an amount not to exceed \$200,000. During the agreement term, there were several unforeseen maintenance events, including; a break in the main irrigation

line, irrigation repairs from the fence project, tree and curb removal for the electric vehicle charging stations, and irrigation line repair from the fiber cable installation. Due to these unplanned events, an increase to the contract is required for continued services through the term of the agreement. This enabling agreement does not commit NCPA to any expenditure of funds. A draft Commission Staff Report, draft First Amendment, and the original agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

Motion: A motion was made by Basil Wong and seconded by Jiayo Chiang recommending Commission approval authorizing the General Manager or his designee to enter into a First Amendment to the Multi-Task General Services Agreement with Parker Landscape Development, Inc. for professional commercial landscape services, tree care, and special projects increasing the not to exceed amount to \$300,000 for continued use at NCPA all facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Palo Alto, Plumas-Sierra, Port of Oakland, Roseville, Santa Clara, and TID. ABSTAIN = Redding. The motion passed.

8. All NCPA Facilities, Members, SCPPA – TPR Enterprises, LLC dba EcoEngineers MTCSA – Staff presented background information and was seeking a recommendation for Commission approval of a five-year Multi-Task Consulting Services Agreement with TPR Enterprises, LLC dba EcoEngineers for Low Carbon Fuel Standard (LCFS) fuel pathway application, verification, and validation consulting services, with a not to exceed amount of \$350,000, for use by NCPA, NCPA Members, SCPPA, and SCPPA Members. All purchase orders will be issued following NCPA procurement policies and procedures.

NCPA and 12 NCPA Members are currently registered reporting entities for the California Air Resources Board's (CARB's) Low Carbon Fuel Standard (LCFS) program. The LCFS program is designed to decrease the carbon intensity of California's transportation fuel pool and incentivize low-carbon and renewable fuel alternatives, including electricity. NCPA and participating Members are able to generate LCFS credits by reporting the use of alternative fuels, including electric vehicle (EV) charging at owned EV chargers, and NCPA Members with residential customers generate LCFS credits associated with an estimate of residential EV charging. LCFS credits can then be sold and the proceeds used to fund programs and projects that support transportation electrification.

Participants in the LCFS program can increase the number of LCFS credits generated by creating fuel pathways with a lower carbon-intensity (CI) than average grid power in California, or by using a liquid fuel cleaner than gasoline or diesel. NCPA and Members have created, or are considering creating, fuel pathways for fuels such as compressed natural gas (CNG), renewable natural gas (RNG), and large hydroelectric power. CARB requires applications for certain types of fuel pathways to include a life-cycle analysis and modeling of carbon-intensity. For approved fuel pathways, CARB requires certain fuel types to undergo independent validation and verification processes.

NCPA issued a Request for Proposal (RFP) LR 2105 on December 17, 2021 to solicit proposals from qualified consultants providing LCFS fuel pathway application, validation, and verification consulting services. NCPA created a review group for the RFP consisting of staff from NCPA and NCPA Member entities, and this review group evaluated and scored timely proposals submitted to the RFP. Seven vendors responded to the RFP by the deadline of January 18, 2022. Based on the scoring review group's evaluation, two vendors were selected to provide fuel pathway application, validation, and verification consulting services, and one additional vendor was selected to provide only fuel pathway validation and verification consulting services. The review group selected EcoEngineers based on its experience, work plan, and costs. This enabling agreement does not commit NCPA to any expenditure of funds. Purchase orders referencing the terms and conditions of the agreement will be issued following NCPA procurement policies and

procedures. NCPA is also entering into agreements with SCS Engineers and Tetra Tech, Inc. for similar services. A draft Commission Staff Report and the draft agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

Motion: A motion was made by Basil Wong and seconded by Khaly Nguyen recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task Consulting Services Agreement with TPR Enterprises, LLC, dba EcoEngineers ("EcoEngineers") for Low Carbon Fuel Standard fuel pathway application, validation, and verification consulting services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$350,000 over five years, for use by NCPA, NCPA Members, SCPPA, and SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Plumas-Sierra, Port of Oakland, Redding, Roseville, and Santa Clara. ABSTAIN = TID. The motion passed.

 Approval of Letter of Agreement 22-SNR-02738 – Staff presented background information and was seeking a recommendation for Commission approval of Letter of Agreement 22-SNR-02738 (WAPA 2022 REC Program) between Western Area Power Administration (WAPA) and Northern California Power Agency (NCPA).

Certain resources in the CVP Project are RPS eligible. Western utilizes a voluntary REC program to distribute RECs to Base Resource customers. This Letter of Agreement (LOA) sets forth rules and requirements for the program. The LOA is renewed each year.

By June 1, 2022, Base Resource customers will have to elect to participate in the CY 2022 WAPA REC Program. NCPA has participated in the program on behalf of the Pool Members. Palo Alto has elected to participate in the program separately. The cost for participation is limited to REC transfer costs, and other administrative costs passed-through by Western which is historically less than \$10,000 each year.

Motion: A motion was made by Mark Sorensen and seconded by Jiayo Chiang recommending Commission approval of the 2022 REC Program Letter of Agreement, and to authorize the General Manager of NCPA to execute the 2022 REC Program Letter of Agreement on behalf of NCPA, including any non-substantive modifications to the 2022 REC Program Letter of Agreement approved by NCPA's General Counsel. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Plumas-Sierra, and Port of Oakland. ABSTAIN = Redding, Roseville, Santa Clara, and TID. The motion passed.

10. Approval of San Jose Clean Energy Services Agreement – Staff will present and seek a recommendation for approval of a Services Agreement between San Jose Clean Energy and Northern California Power Agency for wholesale energy services.

This item was pulled from the agenda. Negotiations are still in progress for this agreement. This item will be brought back at a later time to seek a recommendation for Commission approval.

INFORMATIONAL ITEMS

11. New Business Opportunities – Staff will provide an update regarding new business opportunities.

SJCE RFP for Wholesale Energy Services – NCPA currently provides a variety of wholesale energy services to SJCE. The SJCE Power Management Services Agreement terminates on August 31, 2022. SJCE issued a Request for Proposal (RFP) seeking wholesale energy services from third party suppliers. NCPA responded to SJCE's RFP by submitting a proposal to continue

its supply of certain wholesale energy services, including CAISO Scheduling Agency services. NCPA has been short listed in SJCE's RFP process.

NCPA's Proposal summary for the RFP includes the services listed below:

- SC Agent services for scheduling
- Load forecasting
- Compliance reporting (Resource Adequacy)
- Performance reporting and deal capture
- Dispatch and operations
- Settlement validation
- Management of CRRs
- Development of risk management reports

Other key terms in the proposal include an initial term of three years with an option to extend the term for an additional three two-year terms, and compensation. The draft proposal for the services provided is for a \$733,466 annual fee, with a 3% per year escalation, which would be \$2.26 million during the initial term. NCPA has been initially awarded an offer subject to further negotiation.

Staff is working on a draft agreement focusing on key terms such as indemnification and insurance, scope of services, and environmental requirements. This agreement will be discussed and reviewed between both parties. The final draft of the agreement will be presented to the Facilities Committee seeking a recommendation for Commission approval.

NCPA Renewables RFP Update

Recent Proposals

- Calpine Geothermal Offer (Geysers)
 - Term: 10 years commencing 1/1/2025
 - Volume: 50 MW base 7x24; potentially up to an additional 50 MW
 - Price: To Be Discussed
 - All other terms per the term sheet
- Clearway Renew LLC (Victory Pass / Arica PV + BESS)
 - Term: 20 years
 - Product: 69.5 MW PV plus 15 MW RA only BESS
 - Price: Detail provided on NCPA Connect
 - Estimated COD: June 2024
- Calpine BESS Offer
 - Project: Bear Canyon and West Ford Flat BESS
 - Size: 13 MW / 52 MWh and 25 MW / 100 MWh
 - Term: 15 Years
 - Product: Full Toll or RA Only
 - Price: Detail provided on NCPA Connect
- 12. NCPA Geothermal Unit 3 Battery Energy Storage System (BESS) Staff presented background information regarding the development of a proposed battery energy storage system at the NCPA Geo Plant 2.

NCPA's geothermal facilities are not exporting at full line capacity due to declining steam pressures in the geothermal steam reservoir. NCPA staff is assessing a battery energy storage system that could utilize available capacity on the NCPA Geo 230kV transmission line. The Geo Plant 2 contains Units 3 and 4. Plant 2's original total capacity is ~110 MW. NCPA retired Unit 3 in 2010, due to resource changes. Unit 4 now exports ~40 MW. NCPA has approximately 70 MW of

available capacity on the Fulton transmission line. The development of a proposed battery energy storage system at the NCPA Geo Plant 2 will be broken into three phases.

Project Phases

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- Phase 1 Assessment/Feasibility
 - Phase 1.1 Technical Feasibility/Preliminary Project Cost Estimate
 - Phase 1.2 Market Analysis/Modeling
- Phase 2 Detailed Engineering/Permitting
- Phase 3 Construction/Commissioning

Power Engineers was hired to perform preliminary engineering and budgeting for the proposed BESS at the NCPA Geo Plant 2 in Phase 1.1. Project deliverables included AACE Level 5 complete project cost estimate by Phase, a proposed 1 line diagram, and site map showing the proposed project.

Geo Plant 2 BESS Assumptions

- 20 MWh/80 MW Size (4 Hour Batteries)
 - Largest size based on available area inside existing Plant Yard.
 - Tesla Megapack (LFP Lithium-ion Phosphate)
 - The LFP batteries have a higher energy density but release significantly less heat (approximately 50% less) than the metal-based batteries

The proposed project cost estimate is approximately \$32,708,286 which includes all phases of the project including commissioning. Proposed economic scenarios for Phase 1.2 were provided and discussed. Potential benefits of BESS at the Geo Plant 2 are listed below:

Potential Benefits of BESS at Geo Plant 2

- Flexibility to meet market demands
- Reduced RA cost to Members
- Capitalizing on available transmission capacity
- Cheaper alternative to Calpine Geysers BESS
- Enhanced renewable energy integration
- Positive public image for the Agency

Staff, unless otherwise directed, plans on moving onto Phase 1.2 and retaining the appropriate market model analysis consultant to further develop the economics of the Geo BESS.

13. NCPA Generation Services Plant Updates – Plant Staff provided an informational update on current plant activities and conditions.

Hydro – Collierville (CV) Power House was 100% available during the month of April, and New Spicer Meadows Power House was at 100% availability as well. New Spicer Meadows storage increased by 22,000 acre feet at 24% month over month from 91,000 acre feet to 113,000 acre feet. Last year's peak was at 94,600 acre feet. The California snow water content is 34% of average for this time of year in Central California. Current regulatory and resource agency activities included working through USGS annual review comments, revising all NCPA EAPs for CAOES, held USFS Annual Meeting, and held USFS McKays Soil Relocation Project meeting. Current operations and maintenance activities during the month included 230 kV ROW line patrol, and completion of the FM Global site inspections of CV and McKays.

CTs – April was a fairly quiet month for the CTs. CT1 had 11 actual starts, bringing the FYTD total to 200, of 0 forecasted. CT2 had 1 start this month of 1 forecasted, bringing the FYTD total to 48 starts. Alameda Unit 1 is still in a forced outage due to an oil system leak. Alameda Unit 2 had a

planned outage for AMPS work. CT1 Lodi has used 25.4 (13%) hours of 200 allowed based on a calendar year. CT1 Alameda Diesel Unit 1 has used 12.8 hours of 20, and Unit 2, 10.8 hours of 20, based on a rolling year. Staff reviewed the CAISO Commitment Runs for April 2022.

Geo – There were no safety incidents to report for the month of April. Vegetation for the month included maintaining fire breaks around transmission towers, and clearing brush around the Bear Canyon pump stations. The average estimated net generation level for the month was 93.8 MW. Total estimated net generation was 67.6 GWh. Actual FY 2022 net generation is 672.9 GWh YTD. The FY 2022 Net Generation Forecast has been updated to 800.8 GWh. Maintenance activities continue for the November 2022 Plant 2 overhaul. Routine plant and Steam Field maintenance continued during the month. The Plant 1 Fire System Modification Project continued with repairing underground piping and began commissioning testing.

14. Planning and Operations Update -

Resource Integrations In Progress

- Camp Far West (SVP) Integration Completed
- Antelope Solar (NCPÁ) TBĎ
- Deer Creek June/July 2022
- Tulare Solar Commercial Operations Achieved
- Sandborne Storage Q4 2022
- Summer 2022 Readiness
- Capacity Scarcity
- Hydrology
- Strong Forward Curves
- Reliability
- Credit / Cash Flow
- 14. Next Meeting The next Facilities Committee meeting is scheduled for June 1, 2022.

ADJOURNMENT

The meeting was adjourned at 12:07 pm by the Committee Chair.

Northern California Power Agency May 4, 2022 Facilities Committee Meeting Attendance List

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

MEMBER	NAME
ALAMEDA	
BART	
BIGGS	
GRIDLEY	
HEALDSBURG	
LODI	
LOMPOC	
PALO ALTO	
PLUMAS-SIERRA REC	
PORT OF OAKLAND	
REDDING	
ROSEVILLE	
SANTA CLARA	
TID	
UKIAH	

Northern California Power Agency May 4, 2022 Facilities Committee Meeting Attendance List

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

NAME	AFFILIATION
Carrie Pollo	NCPA
Tany Zimmer	11
Month Hanks	10
Janahuekhardt	11
Mike DeBortoli) C
Jake Eymann	11
Marc Perletier	LT.
Shan Robinson	11
James Mearns	11
Ect. Voce	11
Jonathan Ashcraft Emily hemei	E C
Emily Lemei	10
J	