



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

Minutes

Date: May 23, 2023

To: NCPA Facilities Committee

From: Carrie Pollo

Subject: May 18, 2023 Special Facilities Committee Meeting Minutes

1. Call meeting to order & Roll Call – The meeting was called to order by Committee Chair Alan Harbottle (Alameda) at 9:08 am. Attending via teleconference and/or on-line presentation were Midson Hay (Alameda), Josh Cook (Biggs), Jake Carter (Gridley), Jiayo Chiang (Lodi), CJ Berry (Lompoc), Mike Brozo (Plumas-Sierra), Nick Rossow (Redding), Monica Nguyen and Basil Wong (Santa Clara), and Cindy Sauers (Ukiah). Peter Lorenz (non-voting Representative with TID) also attended via teleconference and online presentation. Those attending in person are listed on the attached Attendee Sign-in Sheet. Committee Representatives from BART, Healdsburg, Palo Alto, Port of Oakland, Shasta Lake, and TID were absent. A quorum of the Committee was established.

PUBLIC FORUM

No public comment.

OPEN SESSION

DISCUSSION / ACTION ITEMS

2. NCPA Geothermal Facility – Geothermal Plant 2, Unit 4 Cooling Tower Temporary Measures Project – Staff presented background information and was seeking a recommendation for Commission approval of the Geothermal Plant 2, Unit 4 Cooling Tower Temporary Measures Project and delegating authority to the General Manager or his designee to award bids, execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not exceed \$250,000, to be funded through a Geothermal FY2023 budget augmentation.

NCPA hired an independent contractor specializing in cooling towers to conduct an inspection of the Geothermal Plant 2, Unit 4 cooling tower. Their inspection revealed that the cooling tower fans, sweet gas header, guardrail, and stairs are in urgent need of repair. While items such as stairs and guardrails can be mitigated with scaffolding, the fans and header are critical for operation. The inspection revealed deteriorated supports for the header and large splits and holes in the fans. Out of an abundance of caution and for the safety of all personnel, NCPA shut down the Geothermal Plant 2 on May 8, 2023. Staff and Committee Members discussed the urgency of the repairs and employee safety.

While the FY2024 budget included an \$800,000 project to replace the fan motor frames, blades, and hubs, temporary repairs are needed immediately to stabilize these items in order to get the unit back online. Complete repairs will be proposed in a future budget. The total cost of this project is not to exceed \$250,000. A breakdown of the project scope and associated costs is shown below.

Scope of Work	Cost
Mobilization/Demobilization	\$8,000.00
Repair Sweet Gas Line Supports	\$60,000.00
Remove, Clean, Refurbish/Replace Cooling Tower	\$140,000.00
Fan Blades, Supports, and Equipment	
Crane and Support	\$17,000.00
Contingency Funds	\$25,000.00
Total Project Cost	\$250,000.00

A FY2023 budget augmentation in the amount of \$250,000 is requested to fund this project. If approved, the additional cost of \$250,000 would require funding from the Geothermal Member agencies in proportion to their individual shares. NCPA will issue a special invoice for \$250,000 on May 26, 2023 and payable by June 15, 2023. Project Participants can elect to provide a letter of direction using their GOR funds or send funds from their bank account.

Motion: A motion was made by CJ Berry and seconded by Brian Schinstock recommending Commission approval authorizing the Geothermal Plant 2, Unit 4 Cooling Tower Temporary Measures Project and delegating authority to the General Manager or his designee to award bids, execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not exceed \$250,000, to be funded through a Geothermal FY2023 budget augmentation. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Lompoc, Plumas-Sierra, Roseville, Santa Clara and Ukiah. ABSTAIN = Redding The motion passed.

3. NCPA Geothermal Facility – Geothermal Plant 1, Unit 1 Steam Strainer Damage Project – Staff presented background information and was seeking a recommendation for Commission approval of the Geothermal Plant 1, Unit 1 Steam Strainer Damage Project and delegating authority to the General Manager or his designee to award bids, execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not to exceed amount of \$2,500,000, to be funded through a Geothermal FY2023 budget augmentation.

On March 1, 2023, NCPA's Geothermal Plant 1, Unit 1 was taken offline for routine seasonal Stretford maintenance. During the course of inspections conducted by NCPA staff, steam strainer failures were found which caused strainer material to enter the steam turbine. Staff was unable to remove the upper casing to determine the extent of the damage. NCPA hired Reliable Turbine Services, LLC (RTS) to perform a Steam Path Inspection. RTS removed the upper turbine case and found screen material throughout the turbine rotor and casing diaphragms. Upon initial visual inspection, minimal obvious damage was seen.

RTS is recommending to pull, clean, and conduct nondestructive testing on the turbine rotor and diaphragms, and to remove and inspect the valves. After the turbine rotor, diaphragms, and upper turbine case are examined and any necessary repairs completed, the equipment will be reassembled and returned to service. It is expected that this work will be completed by June 30, 2023.

It is important to note that this unit is scheduled for a regular overhaul in 2026. During the course of this work, staff will be evaluating whether this scope can count as the regular scheduled overhaul, thus enabling NCPA to defer that future work. Committee Members expressed they would like a Special Facilities Committee meeting if an overhaul will be needed at this time and/or extending the outage. Members would like this plant to be up and running by July 1, 2023.

The total cost of the project is not to exceed \$2,500,000. A breakdown of the project scope and associated costs is shown below:

Scope of Work	Cost
Steam Path Inspection	\$93,685.00
RTS Proposal dated May 3, 2023 (includes mobilization, removal, blast-cleaning, non-destructive testing of rotor and stationary, valve removals and visual inspection, upper casing inspection, report of findings)	\$406,980.00
Additional Repairs, Reassembly, Demobilization	\$300,000.00
Contingency Funds	\$1,699,335.00
Total Project Cost	\$2,500,000.00

It should be noted that the large contingency is to allow for unexpected findings, and to allow for the option of completing the work as an overhaul, deferring the 2026 work. NCPA will not collect the contingency portion of the augmentation unless the work scope dictates the need. NCPA will issue a special invoice for \$800,665 on May 26, 2023 and payable by June 15, 2023. Project Participants can elect to provide a letter of direction using their GOR funds or send funds from their bank account. If it is recommended to overhaul the unit, NCPA will issue a subsequent special invoice for \$1,699,335 at a later date, but prior to the FY deadline date of June 30, 2023.

Motion: A motion was made by Josh Cook and seconded by Jiayo Chiang recommending Commission approval authorizing the Geothermal Plant 1, Unit 1 Steam Strainer Damage Project and delegating authority to the General Manager or his designee to award bids, execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not to exceed amount of \$2,500,000, to be funded through a Geothermal FY2023 budget augmentation. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Lompoc, Plumas-Sierra, Roseville, Santa Clara and Ukiah. ABSTAIN = Redding The motion passed.

4. NCPA Geothermal Facility – FY2023 Geothermal Budget Augmentation for Routine Operations and Maintenance (O&M) – Staff presented background information and was seeking a recommendation for Commission approval of a FY2023 budget augmentation in the amount of \$2,200,000, for application to NCPA's Geothermal facility Routine Operations and Maintenance (O&M) costs as a result of extraordinary work and extreme weather conditions during the year.

On April 28, 2022, the NCPA Commission approved the FY2023 Annual Budget (Resolution 22-45). Over the course of FY2023, various extraordinary events have resulted in higher than projected expenditures for routine operations and maintenance activities at NCPA's Geothermal facility, including various pump failures requiring the need for maintenance and to purchase parts for the pumps, extreme winter weather conditions causing the need for greater than normal maintenance activities including snow removal services, unexpected transmission line damage requiring emergency repairs, and increasing costs of steam royalties due to the rise in energy prices.

NCPA's Geothermal facility is requesting a budget augmentation to the FY2023 Annual Budget to fund these unexpected maintenance activities. The requested amount of the FY2023 Geothermal

budget augmentation is \$2,200,000. This budget augmentation is needed to fully fund the required operations and maintenance costs. The additional cost of \$2,200,000 would require funding from the Geothermal projects' respective member agencies in proportion to their individual shares. NCPA will issue a special invoice for \$2,200,000 on May 26, 2023 and payable by June 15, 2023. Project Participants can elect to provide a letter of direction using their GOR funds or send funds from their bank account.

Motion: A motion was made by Brian Schinstock and seconded by Cindy Sauers recommending Commission approval authorizing a FY2023 budget augmentation in the amount of \$2,200,000, for application to NCPA's Geothermal facility Routine Operations and Maintenance (O&M) costs as a result of extraordinary work and extreme weather conditions during the year. A vote was taken by roll call: YES = Alameda, Gridley, Lodi, Lompoc, Plumas-Sierra, Roseville, Santa Clara and Ukiah. ABSTAIN = Redding. The motion passed.

ADJOURNMENT

The meeting was adjourned at 10:04 am by the Committee Chair.

Northern California Power Agency May 18, 2023 Special Facilities Committee Meeting Attendance List

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

<u>NAME</u>	AFFILIATION
<u>.</u>	
Carrie Pollo	NCPA
BRIAN SCHINGTOCK	Poseine
Rendell Kramer	NCPR
Monty Halles	NCPA
Monty Halles Michael DeBortoli	NCPA
M. Pelletier	NCPA
J. Luchardt	IX CRA
Je Luchardt Tong Zimmen	NIA
,	

Northern California Power Agency May 18, 2023 Special Facilities Committee Meeting Attendance List

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

MEMBER	<u>NAME</u>
ALAMEDA	
BART	
BIGGS	
GRIDLEY	
HEALDSBURG	
LODI	
LOMPOC	
PALO ALTO	
PLUMAS-SIERRA REC	
PORT OF OAKLAND	
REDDING	
ROSEVILLE	BSILLED
SANTA CLARA	
SHASTA LAKE	
TID	
UKIAH	