



651 Commerce Drive
Roseville, CA 95678

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

Minutes

To: NCPA Facilities Committee
From: Carrie Pollo
Subject: March 19, 2024 Special Facilities Committee Meeting Minutes

- 1. Call meeting to order & Roll Call** – The meeting was called to order by Committee Vice Chair Nick Rossow (Redding) at 1:36 pm. Attending via teleconference and on-line presentation were Alan Harbottle, Chris Ferrara, and Ben Rings (Alameda), Elisa Arteaga (Gridley), Terry Crowley (Healdsburg), Jiayo Chiang (Lodi), Brad Wilkie (Lompoc), Nathan Tan (Port of Oakland), and Basil Wong and Monica Nguyen (Santa Clara). Peter Lorenz (non-voting Representative with TID) also attended via teleconference and on-line presentation. Those attending in person are listed on the attached Attendee Sign-in Sheet. Committee Representatives from BART, Biggs, Palo Alto, Plumas-Sierra, and Shasta Lake, TID, and Ukiah were absent. A quorum of the Committee was established.

PUBLIC FORUM

No public comment.

DISCUSSION/ACTION ITEMS

- 2. NCPA Geothermal Facility – Second Amendment to Geothermal Plant 1, Unit 1 Steam Strainer Damage Project** – Staff provided background information and was seeking a recommendation for Commission approval of Second Amendment to Resolution 23-49 authorizing additional funds of \$250,000 for 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 revised total not to exceed amount of \$5,750,000, to be funded from the cancelled Intertie Switch Project in the FY24 budget.

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. 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. RTS completed their inspection of the turbine rotor and found that there was impact damage from the strainer material primarily to the first three stages of the turbine, as well as extensive erosion and wear on the remaining four stages of the turbine. RTS recommended replacement of the blades.

The Geothermal Plant 1, Unit 1 Steam Strainer Damage Project was originally approved by the Commission on May 25, 2023 for an amount not to exceed \$2,500,000. This original approval included \$1,073,465 in contingency funds.

On October 6, 2023, the Commission approved an Amendment to the Geothermal Plant 1, Unit 1 Steam Strainer Project, increasing the budget by \$3,000,000, for an updated total not to exceed of \$5,500,000. While NCPA is on-track to complete the work and return the unit to service on March 21, 2024, due to additional field work on the seals and diaphragm adjustments, the remaining balance of the contingency funds is running low. NCPA would like to increase the contingency by an additional \$250,000 to account for any unexpected findings during the final turbine assembly.

Motion: A motion was made by Brad Wilkie and seconded by Brian Schinstock recommending Commission approval authorizing additional funds of \$250,000 for 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 revised total not to exceed amount of \$5,750,000, to be funded from the cancelled Intertie Switch Project in the FY24 budget. A vote was taken by roll call: YES = Alameda, Gridley, Healdsburg, Lodi, Lompoc, Roseville, and Santa Clara. ABSTAIN = Port of Oakland and Redding. The motion passed.

➤ Josh Cook (Biggs) joined the call prior to the discussion of item 3.

- 3. NCPA Geothermal Facility – First Amendment to Geothermal Plant 1, Unit 2 Turbine Overhaul Project** – Staff provided background information and was seeking a recommendation for Commission approval of the First Amendment to Resolution 24-02 for the Geothermal Plant 1, Unit 2 Turbine Overhaul Project: 1) authorizing additional funding and a budget augmentation of \$2,200,000 for a revised total not to exceed amount of \$9,400,000; 2) 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; and 3) authorizing the use of \$2,200,000 from the Maintenance Reserve to be replenished by Project Participants over a ten-year period in Fiscal Years 2025 - 2034 through the annual budget process.

In December 2023, during a planned transmission line outage scheduled by Pacific Gas and Electric (PG&E), NCPA hired Reliable Turbine Services, LLC (RTS) to perform a nondestructive visual inspection on the Plant 1, Unit 2 turbine rotor L-0 blades. The visual inspection revealed significant wear on the L-0 blades, and RTS recommended that the L-0 blades be replaced. The Geothermal Plant 1, Unit 2 Turbine Overhaul Project was originally approved by the Commission on January 5, 2024 (Resolution 24-02) for an amount not to exceed \$7,200,000.

The Scope of Work for the original proposed Plant 1, Unit 2 Overhaul included the following:

- Turbine Overhaul and Generator Testing
- Transportation and Insurance
- Unit 2 GSU Transformer Overhaul
- Balance of Plant Work
- Lakeville 230kV Line Repairs

As detailed in the original Scope of Work, the Unit 2 turbine rotor and diaphragms were sent off-site to the RTS shop in Sullivan, MO, where the vendor performed the casing assessment along with a full turbine rotor/diaphragm inspection. These inspections revealed that additional refurbishments are needed on the casing and turbine rotor/diaphragm. In addition, NCPA has

identified that the main stop valves will need to have additional maintenance performed. None of this additional work was included in the original base scope.

Motion: A motion was made by Josh Cook and seconded by Basil Wong recommending Commission approval: 1) authorizing additional funding and a budget augmentation of \$2,200,000 for a revised total not to exceed amount of \$9,400,000; 2) 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; and 3) authorizing the use of \$2,200,000 from the Maintenance Reserve to be replenished by Project Participants over a ten-year period in Fiscal Years 2025 - 2034 through the annual budget process. A vote was taken by roll call: YES = Alameda, Biggs, Gridley Healdsburg, Lodi, Lompoc, Roseville, and Santa Clara. ABSTAIN = Port of Oakland and Redding. The motion passed.

ADJOURNMENT

The meeting was adjourned at 2:47 pm by the Committee Vice Chair.

**Northern California Power Agency
March 19, 2024 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>	<u>AFFILIATION</u>
Carnie Pollo	NCPA
Jane Luckhardt	NCPA
BRIAN SCHINTOCK	ROSEVILLE
JEREMY LAWSON	NCPA
Tony Zimmer	NCPA

**Northern California Power Agency
 March 19, 2024 Special Facilities Committee Meeting
 Attendance List**

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

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