



Hydroelectric Facilities FY24 Encumbrance

Facilities Committee
October 23, 2024

Background

- NCPA operates the North Fork Stanislaus Hydroelectric Project (FERC Project No. 2409) on behalf of the project owners.
- Collierville Powerhouse, New Spicer Meadow Powerhouse, and McKays Point Diversion Dam are assets in Project 2409 that require maintenance. Most of the features were constructed in the late 1980's.
- The four projects were discovered after the FY25 Hydroelectric Facilities budget was approved and work needs to be completed by June 30, 2025.
- It should be noted that the projects below have not yet been approved by the Commission and will be presented for Commission approval at a future date.

Background (cont.)

- Project #1 - Collierville (CV) Powerhouse's turbine runner has developed a crack detected during a routine inspection in August 2024.
 - Analysis and perform the necessary maintenance
 - Collierville Powerhouse has no spare runner and lead times for new runners are over one year
 - If this project is not acted on now, a unit is exposed to long duration outages should there be another runner issue.

- Project #2 - New Spicer Meadow (NSM) Powerhouse's building sidelights and roof require maintenance to stop water leakage into the powerhouse.
 - Critical generation equipment needs to be protected from water intrusion into the powerhouse.

Background (cont.)

- Project #3 - New Spicer Meadow (NSM) Dam's spillway is damaged and is in need of maintenance to stay in Federal and State regulatory compliance.
- Project #4 - McKays 17Kv Wildfire Mitigation project for overhead lines was approved in the FY25 budget for \$530,000, however, additional helicopter support will be needed to complete the project on time to reduce the high fire danger risk with exposed conductors.

FY 2025 – Collierville Powerhouse Turbine Runner

Project	Notes	Total Cost to Complete	FY 2024 Current Budget	FY 2025	FY 2025 +
Collierville Powerhouse Turbine Repair	D	838,500	0	0	838,500

Notes:

- D Discretionary
- M Mandatory
- Annual deposit to the Capital
- CR Development Reserve



- NCPA detected a crack in the turbine runner during a routine inspection in August 2024 and installed the spare runner
- NCPA needs to do an analysis on the spare runner and perform the necessary maintenance repair.
- Lead times for a new runner is over one year and if no action is taken now, a unit is exposed to additional outages if another runner issue occurs



October 21, 2024

FY 2025 – New Spicer Meadow PH Sidelight Replacement

Project	Notes	Total Cost to Complete	FY 2024 Current Budget	FY 2025	FY 2025 +
NSMPH Sidelight Replacement	D	200,000	0	200,000	0

Notes:

- D Discretionary
- M Mandatory
- Annual deposit to the Capital
- CR Development Reserve



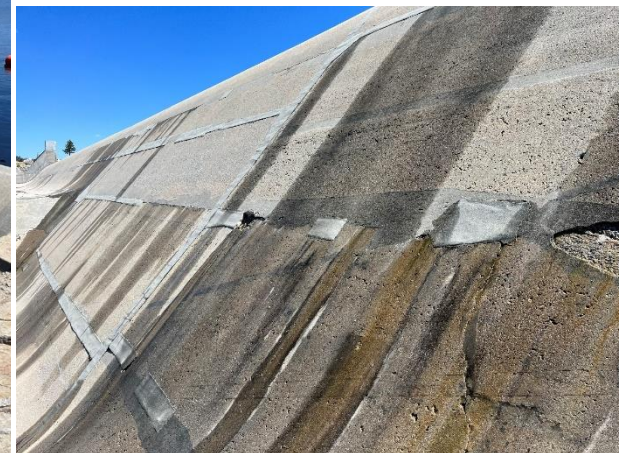
- NCPA New Spicer Meadow Powerhouse has semi-transparent sidelights which are severely degraded and irreparable
- Repair attempts have been made with marginal success only to find brittle materials and additional emerging failures
- Snow and rainwater is leaking into powerhouse adjacent to critical electrical equipment creating a safety and reliability concern
- FM identified the panels as a potential wildland fire vulnerability due to melting and corresponding fire intrusion

FY 2025 – New Spicer Meadow Spillway Maintenance

Project	Notes	Total Cost to Complete	FY 2024 Current Budget	FY 2025	FY 2025 +
NSMPH Sidelight Replacement	M	230,000	0	230,000	0

Notes:

- D Discretionary
- M Mandatory
- Annual deposit to the Capital
- CR Development Reserve




- NCPA New Spicer Meadow Spillway has remaining concrete surface defects that require repair. A portion of the repairs were performed this summer under routine maintenance
- DSOD, FERC, Part 12 Consultant require that repairs be performed
- Engineering and permitting are planned to be complete by January 2025 and site work by June 30, 2025


FY 2025 – McKays 17KV Fire Mitigation for Overhead Line

Project	Notes	Total Cost to Complete	FY 2024 Current Budget	FY 2025	FY 2025 +
McKays 17KV Fire Mitigation for Overhead Line	D	810,000	80,000	530,000	200,000

Notes:

- D Discretionary
- M Mandatory
- Annual deposit to the Capital
- CR Development Reserve





- NCPA has overhead poles with exposed conductor in high fire danger area as identified by Wildfire Mitigation Plan
- To reduce risk, NCPA evaluated options to reduce wildfire risk created by exposed conductors and wood poles
- Design work is complete, with permitting to begin in Winter '24, and on-site work planned for January of 2025
- The additional \$200,000 will complete the project with aerial support. It was not previously known that aerial support would be needed.

Fiscal Impact

Funding Source		Requested Amount
Transfer From:	Excess already collected from Members for FY24 Encumbrance from: <ul style="list-style-type: none"> • Lower Actual Costs for Water for Power, • Lower Usage for Cloud Seeding, • Higher interest income, and • FEMA claim reimbursements to be returned or reallocated for: 	
Transfer To:	CV Runner Analysis & Maintenance	\$838,500
	NSM Spillway Maintenance	\$230,000
	NSM Sidelight & Roof Maintenance	\$200,000
	FY25 McKays 17Kv Wildfire Mitigation (Already Approved FY25 \$530,000 and FY24 \$80,000)	\$200,000
	Total	\$1,468,500

Selection Process

- NCPA is currently preparing to solicit competitive bids from multiple vendors to perform the work required for these projects. NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA will issue purchase orders based on cost and availability of the services needed at the time the service is required.

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

- Staff is seeking a recommendation from the Facilities Committee for Commission approval authorizing the FY24 Hydroelectric Facilities Encumbrances and reallocating of various funds in the FY24 budget in the amount of \$1,468,500 to help fund the CV Turbine Runner Repair Project, NSM Spillway Maintenance Project, NSM Sidelight & Roof Maintenance Project and additional funding for the budget approved McKays 17Kv Wildfire Mitigation Project, pending NCPA encumbrance processing.