



# Commission Staff Report

**DATE:** July 28, 2016

**COMMISSION MEETING DATE:** August 25, 2016

**SUBJECT:** Adit 4 Spoils Stabilization Project – Authorizing the General Manager to issue Purchase Orders For Engineering and Permitting Support Associated With Adit 4 Landslide

**AGENDA CATEGORY:** Discussion/Action

<b>FROM:</b>	Ken Speer Assistant General Manager	<b>METHOD OF SELECTION:</b>
Division:	Generation Services	N/A
Department:	Hydro	<i>If other, please describe:</i>
		1T

**IMPACTED MEMBERS:**

All Members	<input type="checkbox"/>	City of Lodi	<input checked="" type="checkbox"/>	City of Ukiah	<input checked="" type="checkbox"/>
Alameda Municipal Power	<input checked="" type="checkbox"/>	City of Lompoc	<input checked="" type="checkbox"/>	Plumas-Sierra REC	<input checked="" type="checkbox"/>
Bay Area Rapid Transit	<input type="checkbox"/>	City of Palo Alto	<input checked="" type="checkbox"/>	Port of Oakland	<input type="checkbox"/>
City of Biggs	<input type="checkbox"/>	City of Redding	<input type="checkbox"/>	Truckee Donner PUD	<input type="checkbox"/>
City of Gridley	<input type="checkbox"/>	City of Roseville	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>
City of Healdsburg	<input checked="" type="checkbox"/>	City of Santa Clara	<input checked="" type="checkbox"/>		<input type="checkbox"/>

*If other, please specify.*

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*Place an X in the box next to the applicable Member(s) above.*

## **RECOMMENDATION:**

Staff recommends that the NCPA Commission approve Resolution 16-XX authorizing the General Manager or his designee to issue Purchase Orders for not to exceed \$500,000 against previously approved Multi-Task Services Agreements for engineering and permitting support associated with the Adit 4 landslide.

## **BACKGROUND:**

The Adit 4 Tunnel Spoils (Spoils) are located approximately 1 ½ miles up canyon from the Collierville Powerhouse in Calaveras County. The Spoils incurred water-related damage in December 2015 and require remediation to stabilize the facility and prevent further erosion to Clark Creek.

NCPA operates the North Fork Stanislaus Hydroelectric Project (FERC Project No. 2409), which was constructed from 1986 to 1989. One of the project features is an 8.5 mile long pressurized water conveyance tunnel between the McKays Point Diversion Dam and the Collierville Power House. The tunnel has two (2) access adits. At one of these adits (Adit No. 4), tunnel rock cuttings Spoils were permanently stockpiled immediately below in a natural drainage in compliance with the Revised Spoils Disposal Plan dated April 1987 under a Right-of-Way Grant (CA 8281) from the United States Department of the Interior, Bureau of Land Management.

The Spoils facility includes approximately ¼ mile of the water conveyance culverts and gunite lined channels atop the Spoils. To mitigate erosion, an interim system of elevated surface culverts was installed to convey the water safely away from the toe of the failure to the erosion-resistant native drainage channel. This interim system will remain in-place until the design, permitting, and construction of the permanent erosion work is completed.

A Basis of Design Report (BODR) was completed in June by GHD Consultants. This report evaluated a wide set of alternatives to determine which repair project would meet NCPA's objectives. Project alternatives ranged in costs estimated from \$4.3M to \$12.8M (see Table 1). The cost estimates for three of the alternatives were effectively equal based upon their nominal spread and the expected uncertainties of estimates made at preliminary design. The Replacement In-kind alternative was not selected for further design because it did not meet all of NCPA's project objectives, namely, that it would possess the same inadequate safety factors that existed prior to the Spoils facility failure. The Slope-back alternative is considered the preferred option due to its cost and relative constructability benefits. Accordingly, it is anticipated that this option will be progressed from preliminary to final design. The repair consists of replacing the failed internal drainage and surface creek conveyance systems and rebuilding the failed slope section into a stable configuration.

Table 1: Repair Alternative Summary

<b>Alternative</b>	<b>Preliminary Estimate</b>	<b>Comment</b>
Remove Spoils	\$12.8M	Significant unknowns
Replace in-kind	\$4.3M	Does not meet current design standards
MSE wall, drainage facilities replacement	\$4.6M	Constructability questions
<b>Slope-back, drainage facilities replacement</b>	<b>\$4.5M</b>	<b>Preferred</b>

**FISCAL IMPACT:**

Preliminary budget estimates to complete the repair are \$4.5M. As detailed design progresses, cost estimates will be updated. An insurance claim is presently under consideration. The insurer has retained an outside engineer to review the site damage, as well as the reports produced by NCPA to date. Staff provided the BODR to the insurer in June and will continue discussions as appropriate.

Preliminary cash flow expenditures for the remainder of 2016 are estimated at \$0.3M for engineering consulting and staff time. Cash flow expenditures for 2017 for construction and quality control/inspection are estimated at \$4.2M. All NCPA procurement policies and procedures, including competitive bidding and Public Works bidding, will be followed during the procurement processes.

**SELECTION PROCESS:**

The Adit 4 Spoils Facility has incurred substantial damage, is currently unstable, and requires immediate repair to prevent further damage and ensure the safe and environmentally compliant operation. The design, environmental permitting, and public construction bidding must be completed in an accelerated timeframe in order to complete the work in 2017. In consideration of the need to maintain the accelerated timeframe, it is recommended that the Commission authorize the General Manager or his designee to execute all necessary agreements (as approved by General Counsel) to complete the repair work to the Adit 4 Spoils Facility rather than bringing each individual design/construction contract piecemeal to the Commission for approval.

This delegation of contracting authority to the General Manager does not commit NCPA to any expenditure of funds. At the time services are required, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures.

- Engineering proposals will be evaluated for qualifications, ability to meet NCPA's requirements, and price. Staff is currently conducting a competitive bidding process for engineering design and project support. Invitations to propose on the engineering work were extended to five (5) qualified firms. Three (3) firms attended the mandatory pre-

proposal job walk. Proposals are due by noon on Tuesday, August 2<sup>nd</sup> and will be under review at the time of this Facilities Committee meeting.

- Construction bidding is anticipated for the Spring of 2017. Pending authorization by the NCPA Commission, bids will be awarded in accordance with the public contract code to the lowest responsive responsible bidder at the time the service is required.

#### **ENVIRONMENTAL ANALYSIS:**

A Notice of Exemption was filed on January 27, 2016 to conduct the interim site stabilization measures that were completed shortly thereafter. An environmental analysis of the proposed project will be conducted and all necessary permits and CEQA filings will be made after the construction project has been adequately defined through design and prior to contract award for the permanent repair activities planned for 2017. It is anticipated that all necessary environmental consultations and authorizations will be granted in time to complete the project ahead of the 2017 rainy season. However, these consultations with the five (5) jurisdictional environmental agencies and CEQA process could affect the schedule.

#### **COMMITTEE REVIEW:**

The recommendation above was reviewed by the Facilities Committee on August 3, 2016 and was *[recommended for Commission approval.] For Facilities Committee meetings where a quorum was not present: No formal action was taken due to the lack of a quorum, however, the Project participants present at the meeting voiced their support for the recommendation below and no other meeting attendees had any objections.*

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (1):

- Resolution

**RESOLUTION 16-XX**

**RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY  
AUTHORIZING THE GENERAL MANAGER TO ISSUE PURCHASE ORDERS FOR  
ENGINEERING AND PERMITTING SUPPORT ASSOCIATED WITH ADIT 4 LANDSLIDE**

**(reference Staff Report #xxx:16)**

WHEREAS, the Northern California Power Agency (NCPA) operates and maintains on behalf of the project owners Hydroelectric Facilities; and

WHEREAS, the Hydroelectric Facilities Adit 4 Spoils Facility has incurred substantial damage, is currently unstable, and requires immediate repair to prevent further damage and ensure the safe and environmentally compliant operation; and

WHEREAS, the design, environmental permitting, and public construction bidding must be completed in an accelerated timeframe in order to complete the work in 2017; and

WHEREAS, a California Environmental Quality Act Notice of Exemption was filed on January 27, 2016, and additional environmental review under the California Environmental Quality Act will be completed after design is sufficiently advanced, but prior to construction bidding;

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to issue Purchase Orders for not to exceed \$500,000 against previously approved Multi-Task Services Agreements for engineering and permitting support associated with the Adit 4 landslide.

PASSED, ADOPTED and APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2016 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
CAROL GARCIA  
CHAIRPERSON

ATTEST:

\_\_\_\_\_  
CARY A. PADGETT  
ASSISTANT SECRETARY