

PMC-EF2a

(2/04/02)

**U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION**



RECIPIENT: Sacramento Municipal Utility District

STATE: CA

PROJECT TITLE : New Slab Creek Powerhouse Project

Funding Opportunity Announcement Number DE-FOA-0000486	Procurement Instrument Number DE-EE0005413	NEPA Control Number GFO-0005413-001	CID Number GO
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Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

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| A9 Information gathering, analysis, and dissemination | Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.) |
| C12 Energy system demonstration actions | Siting, construction, operation, and decommissioning of energy system demonstration actions (including, but not limited to, wind resource, hydropower, geothermal, fossil fuel, biomass, and solar energy, but excluding nuclear). For purposes of this category, "demonstration actions" means actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment. |

Rational for determination:

DOE is proposing to provide federal funding to the Sacramento Municipal Utility District (SMUD) to design, construct and test a new 5 MW powerhouse located on the South Fork American River in California, approximately ¼-mile downstream from the existing Slab Creek Powerhouse.

SMUD owns and operates the Upper American River Project (UARP), a hydroelectric facility located on the western slope of the Sierra Nevada. The UARP lies within the El Dorado and Sacramento counties. The proposed powerhouse would be directly adjacent to the portal of White Rock Tunnel Adit #3. The new powerhouse would be a reinforced concrete structure, founded on bedrock and capable of withstanding the high tail-water elevation associated with a 100-year flood frequency event. The powerhouse would contain twin turbine-generators with a combined capacity of up to 322 cfs. The twin Francis turbines and direct-coupled synchronous generators, rated at 2.5 MW each, (5 MW powerhouse) would be capable of producing an average 15 GWh of generation annually.

Tasks include:

TASK 1 – Project Management and Reporting
Subtask 1.1 Kick-off Meeting
Subtask 1.2 Technology Transfer Plan
Subtask 1.3 Critical Project Review Meetings
Subtask 1.4 Quarterly Progress Reports
Subtask 1.5 Final Report

TASK 2 – Licensing and Permitting
Licensing and permitting activities would include amending the existing FERC license, filing and issuance of State and Federal permit (7, 106, 401, 404, 1600), stakeholder interaction, completion of environmental studies related to permitting activities.

TASK 3 – Final Design
Final design activities would include engineering design, equipment specification, and construction cost estimate. FERC must approve the final design phase of the proposed New Slab Creek Powerhouse Project, as well as the Quality Control and Inspection Plan (QCIP) and the Temporary Construction Emergency Action Plan (TEAP).

Subtask 3.1 Final Design Contractor Selection
Subtask 3.2 10 % Design
Subtask 3.3 50% Design

Subtask 3.4 90% Design
Subtask 3.5 100% Design

TASK 4 – Construction and System Testing

Construction activities and system testing would involve the following steps: (1) construction contractor bid process and selection, (2) streambank foundation and related civil works, (3) water conveyance civil works, (4) powerhouse civil works, (5) equipment purchase, (6) transmission and Interconnection and (7) start-up and system testing.

Construction activities would result in approximately 0.4 acres of excavation/clearing of land to accommodate the proposed powerhouse. An additional 0.1 acres of water would be filled in by the footprint of the proposed powerhouse.

The proposed project would require an amendment to SMUD's existing FERC license; modification to the 401 Water Quality Certificate from California State Water Resources Control Board; a new 404 permit from US Army Corps of Engineers; a new 1600 streambed alternation agreement with the California Department of Fish and Game; and a new construction permit with El Dorado County. SMUD would also consult with the California SHPO and the US Fish and Wildlife Service. FERC would complete an environmental assessment.

FERC regulations (18 CFR §4.38 (6)) require a three-stage consultation process, including two stages of pre-filing consultation and one after the application is filed. In the post-filing consultation period, SMUD will file permit applications for all relevant environmental permits. Also during the post-filing process, the resource agencies and other parties will have the opportunity to comment on the project, specifically after FERC issues its draft environmental assessment.

Per the DOE NEPA implementing regulations (Appendix C to Subpart D to 10 CFR Part 1021 – C12), preparation of an environmental assessment is required prior to allowing the use of federal funds for Task 4. DOE has determined Task 1-3 are allowable interim actions that can be completed concurrent with and/or in advance of the environmental assessment. All activities related to construction and/or ground breaking, and commissioning and/or operation of the proposed project are prohibited until a final NEPA determination has been made.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Task 4 (construction and operation of the proposed 5MW powerhouse).

This restriction does not preclude you from:

Task 1-3 (final design and permitting).

SMUD is authorized to initiate the preparation of an environmental assessment, consistent with DOE NEPA implementing regulations and in coordination with their designated DOE Project Officer.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

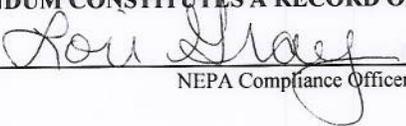
Cristina Tyler 3.7.2012

DOE Funding: \$1,494,750

Cost Share: \$11,302,297

Total Project Costs: \$12,797,047

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: 
NEPA Compliance Officer

Date: 3/7/12

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: 
Field Office Manager

Date: 3-16-12