UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

March 5, 2007

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Subject: Lake Elsinore Advanced Pumped Storage Project Final Environmental Impact Statement (EIS), FERC No. 11858, Riverside County, California [CEQ# 20070027]

Dear Ms. Salas:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementation Regulations at 40 CFR 1500-1508, and our review authority under Section 309 of the Clean Air Act.

The Final EIS indicates that the Federal Energy Regulatory Commission (FERC) Staff Alternative is the Preferred Alternative. In our April 27, 2006, comments on the Draft EIS, we expressed concerns about this alternative because of its potential significant adverse impacts to watershed resources, including water quality and habitat, and to air quality. We recommended that additional information be provided in the Final EIS regarding impacts to wetlands and other waters of the United States, water quality, habitat, air quality and project conformity with the State Implementation Plan (SIP), and mitigation and monitoring requirements.

We continue to have concerns about the proposed project, and the Final EIS remains insufficient because it does not fully disclose the project's potential impacts and identify appropriate mitigation measures. The Final EIS does not provide sufficient information on the aquatic resources at risk or project-related impacts to wetlands and other waters of the United States. The Final EIS also does not provide sufficient information to demonstrate that any of the build alternatives represent the least environmentally damaging practicable alternative (LEDPA) to meet the project purpose, as required under the Federal Guidelines (Guidelines) at 40 CFR 230 promulgated under Section 404(b)(1) of the Clean Water Act. In addition, the Final EIS does not provide sufficient information to determine whether the preferred alternative conforms to the applicable SIP.

We recommend that the Record of Decision (ROD) for this project include updated information about impacts to waters of the U.S., a LEDPA analysis, and identification of compensatory mitigation measures for losses of waters of the U.S. The ROD should also include the conformity determination if one is needed for this project. We also reiterate a number of mitigation measures that should be included in the ROD to minimize adverse environmental impacts to the extent possible.

We appreciate the opportunity to review this Final EIS and request a copy of the Record of Decision when it becomes available. If you have any questions, please call me at (415) 972-3846, or have your staff call Jeanne Geselbracht at (415) 972-3853.

Sincerely,

/S/ Connell Dunning for

Nova Blazej, Manager
Environmental Review Office

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Enclosure: EPA's Detailed Comments

cc: Virgil Mink, Cleveland National Forest
Ron Young, Elsinore Valley Municipal Water District
Kathy Hsiao, South Coast Air Quality Management District
Mike Laybourn, South Coast Air Quality Management District
Dave Castanon, U.S. Army Corps of Engineers
Dan Swenson, U.S. Army Corps of Engineers
Jim Canaday, State Water Resources Control Board
Dave Woelfel, Santa Ana Regional Water Quality Board
Jeremy Hass, San Diego Regional Water Quality Board
Doreen Stadtlander, U.S. Fish and Wildlife Service, Carlsbad
Rodney McInnis, National Marine Fisheries Service, Long Beach

EPA DETAILED COMMENTS
LAKE ELSINORE ADVANCED PUMPED STORAGE PROJECT FINAL EIS
MARCH, 2007

NEPA Analysis and Coordination

Several of our comments on the Draft EIS are not satisfactorily addressed in the Final EIS, as the Final EIS defers these issues to the co-applicants and other permitting agencies to be addressed at a later date. For example, regarding our request for Clean Water Act Section 404 permitting information in the Final EIS, Response 53 states that any license or permit issued by the Federal Energy Regulatory Commission (FERC) or the U.S. Forest Service (USFS) would include requirements to complete studies and resolve the details of any outstanding environmental issues prior to the commencement of construction. However, in accordance with the Council on Environmental Quality's (CEQ) National Environmental Policy Act (NEPA) Implementation Regulations, Federal agencies should, to the fullest extent possible, integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively [40 CFR 1500.2(c)]. Furthermore, EISs should state how alternatives and decisions will or will not achieve the requirements of other environmental laws and policies [40 CFR 1502.2(d)]. If FERC or USFS issues a license or permit for a project that conflicts with the Federal Guidelines (Guidelines) at 40 CFR 230 promulgated under Section 404(b)(1) of the Clean Water Act, the U.S. Army Corps of Engineers (Corps) could deny a Clean Water Act Section 404 permit for that project. If this occurs, a new project that meets the Guidelines would need to be analyzed and a new NEPA process undertaken. For these reasons, Federal agencies concurrently conduct NEPA and Section 404 analyses.

Because several important analyses and mitigation needs are left unaddressed in the Final EIS, FERC and USFS should address them in their respective Records of Decision (ROD). In accordance with 40 CFR 1505.2(c), RODs shall:

> "State whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation."

Our comments below identify the issues that should be addressed in the FERC and USFS RODs.

Water Quality Impacts

In our comments on the Draft EIS, we stated that the Final EIS needs to demonstrate that the proposed alternative is the least environmentally damaging practicable alternative (LEDPA) to meet the project purpose, as required under the Guidelines. In general, no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. We also recommended that the Final EIS include a clear, concise purpose statement for the project which allows for the analysis of alternatives that avoid waters to the extent practicable pursuant to the Guidelines; expand the

alternatives analysis to consider other alternative sites and technologies and sustainable approaches within a reasonable market area, which could practicably meet the project purpose; and discuss appropriate mitigation measures for those impacts that are unavoidable. We note that the Corps also made similar comments on the Draft EIS. However, the Final EIS does not address these issues.

As we stated in our Draft EIS comments, although the co-applicants will be the Section 404 permit applicant, FERC should have coordinated with the Corps and the co-applicants regarding compliance with the Guidelines so that the Final EIS would include this information.

> **Recommendation:** The ROD should indicate that FERC, USFS, and the co-applicants have coordinated with the Corps on the Clean Water Act Section 404 permit.

> **Recommendation:** The ROD should include the LEDPA analysis for both the power production and power transmission pieces of the project. The analysis should address direct, indirect, and cumulative impacts.

> **Recommendation:** The ROD should identify the compensatory mitigation measures that will be taken by the co-applicants for both the power production and power transmission pieces of the project.

The Final EIS (Response 98) states that project operations could negatively affect zooplankton populations in Lake Elsinore through entrainment; however, the extent of the impact would depend on the depth of the intake.

> **Recommendation:** The ROD should discuss depth optimization mitigation that would be required to minimize impacts to zooplankton and fish in the lake.

In our Draft EIS comments, we expressed our concerns regarding the potential impacts on downstream water quality from leaks or larger discharges from the reservoir. We recommended that the Final EIS include the leak detection monitoring and mitigation plan, including the action levels and response measures that would be required for the types of leaks that could occur. However, these were not included in the Final EIS.

> **Recommendation:** We recommend the ROD include the leak detection monitoring and mitigation plan, including the action levels and response measures that would be required for the types of leaks that could occur.

On page 3-103, the Final EIS indicates that, because jurisdictional wetlands do not exist at the Morrell Canyon site, the consultant conducted a modified CRAM (California Rapid Assessment Methodology) assessment. However, we were unable to find the methodology in the Final EIS or its appendices.

Development of CRAM is funded by Section 104 Wetlands Protection Grants from EPA, the California Coastal Commission, the Southern California Coastal Water Research Project, the San Francisco Estuary Institute, and the Association of Bay Area Governments. The CRAM is being

developed to quickly assess the condition of a broad range of wetland types throughout most of California's diverse landscape. CRAM is still in development and currently undergoing revision. Any manipulation of CRAM has not been approved and should not be used to evaluate the functions of waters at the sites under consideration.

> **Recommendation:** We recommend FERC: (1) not reference or rely upon the results of the modified CRAM and (2) confirm its jurisdictional delineation with the Corps.

Air Quality Impacts

General Conformity

The Final EIS does not provide sufficient information to determine whether the preferred alternative conforms to the applicable State Implementation Plan (SIP). Response 251 states that a preliminary conformity determination will be completed prior to issuance of any license for the project. This analysis should have been prepared and incorporated into the Final EIS in order to assure that the project conforms to the SIP. If the preferred alternative does not conform to the SIP, the project may need to be revised and/or additional mitigation may be needed.

> **Recommendation:** The ROD should discuss how the project conforms to the SIP. If a conformity determination is conducted, it should be incorporated into the ROD, and the ROD should identify the measures that will be required by the co-applicants.

Construction Mitigation Measures

In response to our comment regarding the need for air pollutant emissions mitigation, the Final EIS states that fugitive dust mitigation is addressed in the Final EIS (Response 252). However, we were unable to find additional mitigation measures for PM10 or PM2.5 (particulates smaller than 10 microns and 2.5 microns in diameter, respectively) in the document. Response 252 also states that FERC recommends that the licensees consult with the South Coast Air Quality Management District to comply with best practices for mitigating exhaust emissions from construction equipment and evaluate the feasibility of measures to reduce construction emissions. However, the Final EIS does not identify appropriate mitigation measures for exhaust emissions. In accordance with CEQ's NEPA Implementation Regulations, EISs shall include appropriate measures to mitigate adverse environmental impacts. 40 CFR 1502.14(f) and 1516(h). In light of the project area's non-attainment status for PM2.5, PM10, carbon monoxide, and ozone, we reiterate our recommendation that FERC and USFS include a number of measures to minimize construction emissions at the reservoir site, the power house site, and along the transmission lines.

> **Recommendation:** At a minimum, we recommend the following measures be included in the project fugitive dust mitigation plan, and referenced and adopted in the ROD:

- Water active construction sites as needed or apply a non-toxic soil stabilizer;
- Vehicles hauling soil or other loose materials will be covered with tarp or other means;

- Cover or apply soil stabilizers to exposed stock piles;
- Sweep adjacent paved streets with water sweepers in the event soil materials are carried onto them;
- Limit traffic speeds in the construction area and along access roads;
- Cover or apply soil stabilizers to disturbed areas within five days of completion of the activity at each site; and
- Reclaim and revegetate disturbed areas as soon as practicable after completion of activity at each site.

Recommendation: We recommend the following measures be required of the co-applicants for project construction, and referenced and adopted in the ROD.

- Use particle traps and other appropriate controls to reduce emissions of diesel particulate matter (DPM) and other air pollutants. Traps control approximately 80 percent of DPM, and specialized catalytic converters (oxidation catalysts) control approximately 20 percent of DPM, 40 percent of carbon monoxide emissions, and 50 percent of hydrocarbon emissions;
- Visible emissions from all heavy duty off road diesel equipment should not exceed 20 percent opacity for more than three minutes in any hour of operation;
- Use diesel fuel with a sulfur content of 15 parts per million or less, or other suitable alternative diesel fuel, substantially reducing DPM emissions;
- Minimize construction-related trips of workers and equipment, including trucks and heavy equipment;
- Lease or buy newer, cleaner equipment (1996 or newer model);
- Employ periodic, unscheduled inspections to ensure that construction equipment is properly maintained at all times and does not unnecessarily idle, is tuned to manufacturer's specifications, and is not modified to increase horsepower except in accord with established specifications.

Other Mitigation Measures

The mitigation and potential contingency measures for several other resource impacts are not specified in the Final EIS. We recommend the ROD identify and describe all appropriate mitigation measures and contingency measures (should they be deemed necessary based on monitoring results) for the issues listed below. The ROD also needs to state whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not [40 CFR 1505.2(c)].

- Erosion/sedimentation control Best Management Practices for all project construction activities;
- Specific immediate remediation measures in the upper reservoir that would be taken in the event water and non-native aquatic species are released into the San Juan Creek drainage;
- Remedial actions if monitoring reveals changes in groundwater levels or seepage into tunnels;

- Enhancement of nearshore habitat on Lake Elsinore to aid establishment of sustaining populations of desirable sport fish;
- Prevention and control of noxious weeds and exotic plants of concern from construction activities;
- Remediation plan to eliminate or reduce project-related effects on nesting shorebirds, waterfowl, and other birds; and
- Contingency measures in the event that project-related impacts on temperature, dissolved oxygen, or other parameters in Lake Elsinore are unacceptable.