UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

January 6, 2009

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
Office of Energy Projects
888 First Place, N.E.
Washington, DC 20426

Subject: Draft Environmental Impact Statement (DEIS) for Relicensing the South Feather Power Project – FERC Project No. 2088-068 - California (CEQ #20080462)

Dear Ms. Bose:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the South Feather Power Project – FERC Project No. 2088-068. Our comments are provided under the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act. Based upon our review, we have rated the proposed action as *Environmental Concerns- Insufficient Information (EC-2)*. See attached "Summary of the EPA Rating System" for a description of the rating. The basis for the rating is summarized below and further detailed in our enclosed comments.

The Federal Energy Regulatory Commission (FERC) is considering an application from the South Feather Water and Power Agency (SFWPA) to relicense the existing 104-megawatt (MW) South Feather Power Project. The South Feather Power Project is a water supply/power project located on the South Fork Feather River, Lost Creek, and Slate Creek, in Butte, Yuba, and Plumas counties, California. FERC must decide whether to relicense to SFWPA for the South Feather Power Project and what conditions, if any, should be placed on the license. The DEIS considers SFWPA's Proposed Action, FERC's alternative to the Proposed Action (Staff Alternative), the Staff Alternative with mandatory conditions, and a no-action alternative – continued operation with no changes.

While we recognize that the South Feather Power Project meets important water supply and power generation needs, we have concerns about the analysis of the no-action alternative, potential impacts related to construction activities and water quality impacts. We also request additional information regarding the impacts of climate change on the South Feather Power

Project and the analysis of cumulative impacts. Please see the enclosed Detailed Comments for a description of these concerns and our recommendations.

We appreciate the opportunity to review this DEIS and are available to further discuss all recommendations provided. When the Final EIS is released for public review, please send two copies to the address above (Mail Code: CED-2). If you have any questions, please contact me at 415-972-3521, or contact Tom Plenys, the lead reviewer for this project. Tom can be reached at 415-972-3238 or plenys.thomas@epa.gov.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office (CED-2)

Enclosures: Summary of EPA Rating Definitions
Detailed Comments

Analysis of Alternatives

No-Action Alternative

Defining the no-action alternative is a critical step in the environmental analysis as it provides a baseline for comparison with the action alternatives. The no-action alternative does not necessarily constitute a no-impact baseline, as continuation of the existing practices may cause or contribute to significant environmental impacts. EPA believes that to interpret the "no action" alternative as having "no impacts" may not be consistent with the rigorous analysis described in 40 CFR 1502.14.

The Draft Environmental Impact Statement (DEIS) does not provide sufficient information on the environmental impacts of the no-action alternative. Section 3.4 (No-Action Alternative, pg. 3-188) states, *"Under the no-action alternative, the project would continue to operate as it has in the past. None of the licensee's proposed measures or the resource agencies' recommendations and mandatory conditions would be required, and the existing trout populations would not be enhanced as a result of increased minimum flows. The continued operation of existing South Feather facilities would continue to be of importance to water supply, recreation, generation of renewable energy, and minimization of atmospheric pollutants. The continued operation of the existing facilities under the no-action alternative would, on average, result in the annual generation of 477,125 MWh of clean energy."*

There is no analysis of the environmental impacts, on each resource, of implementing the no-action alternative, thereby preventing an adequate comparison of all alternatives.

Recommendation:

- The Final EIS (FEIS) should provide additional information on the no-action alternative to describe the environmental impacts of continuing to operate the project under the terms and conditions of the current license. See EPA's recommendation under *Comparison of Alternatives* (below) for a suggested format to summarize this information.

Comparison of Alternatives

The DEIS describes the South Feather Water and Power Agency's (SFWPA) proposal of continued operation of the South Feather Power Project and recommends conditions for the relicensing of the project. SFWPA's Proposed Action includes a number of environmental measures described in Section 2.2.4 (pg. 2-11). Federal Energy Regulatory Commission (FERC) staff have evaluated the application, and proposed a Staff Alternative that contains modifications to SFWPA's proposal as well as additional measures (pg. 2-18) to address FERC's and other resource agencies' concerns. In addition to the Proposed Action and the Staff Alternative, FERC

also evaluates the Staff Alternative in conjunction with additional mandatory conditions proposed by the Forest Service (pg. 2-22). The final alternative is the no-action alternative.

40 CFR 1502.14 of the Council of Environmental Quality regulations describes how an EIS should present the environmental impacts of the proposed action and alternatives (including the no-action alternative) in a comparative form, sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public.

The environmental measures proposed under the action alternatives are essentially mitigation measures to evaluate (monitor) or lessen environmental impacts from continued operation of the existing hydroelectric projects. For each of the resources addressed in Chapter 3 (Environmental Analysis), the DEIS describes the affected environment and discusses the applicant's proposed actions. FERC then provides an analysis that includes their recommendations.

Although the DEIS provides a thorough analysis of the Proposed Action, as well as FERC's rationale for their preferred alternative (Staff Alternative), the information in the DEIS is not presented in a way that provides the reader with a clear comparison of the alternatives and their environmental effects. As previously stated, the evaluation focuses on implementation of the proposed environmental measures and does not address the potential environmental impacts of relicensing the project under the terms and conditions of the current license (i.e., the no-action alternative).

Recommendation:

- The Alternatives section of the FEIS should include a concise summary of the environmental analysis performed in Chapter 3 that allows for a clear comparison of the impacts of all alternatives, including the no-action alternative. For each environmental resource evaluated in Section 3.3, the comparison should clarify:

    a) the impacts of the current hydroelectric project operation on that resource,
    b) the environmental measures that are proposed under each alternative, and
    c) the impacts of the project after implementing the environmental measures under each alternative.

EPA suggests that a table format be used to summarize and display the information. For this particular DEIS, since the no-action alternative is the continuation of the existing project, the no-action alternative column should summarize the information referenced in (a), above (i.e., the impacts of the project). Information for (b) and (c) would be summarized in other columns addressing SFWPA's Proposed Action and FERC's Staff Alternative with and without the additional mandatory conditions.

Clean Water Act (CWA) Section 401 Requirements

SFWPA filed an application for a CWA Section 401 Water Quality Certification (WQC) on May 16, 2008 with the State Water Resources Control Board (SWRCB) (pg. 2-15). Without a

401 certificate, the South Feather Power Project cannot be licensed. The SWRCB is required to take action within one year (i.e., by May 16, 2009) of the application filing date. No details about the application nor its status were found in the DEIS.

Recommendation:

- The FEIS should describe the status of the CWA 401 WQC that SFWPA has requested from the SWRCB. The FEIS should discuss the application in detail as it relates to water quality impacts from current and future project operations and address any water-quality issues that have been identified by the SWRCB.

Impacts from Construction-related Activities

The DEIS describes a number of proposed actions that may involve construction activities, such as the construction of a multi-use trail below Little Grass Valley dam, replacement and rehabilitation of all existing recreational facilities, and future construction of new facilities as user demand increases (pg. 2-11). EPA recommends the FEIS include measures that will be implemented to ensure that in-water work activities do not result in excessive short-term turbidity or other impacts.

Recommendation:

- EPA recommends the FEIS provide additional detail describing how activities will be performed for all proposed dismantling or construction actions, including in-water work activities. Include measures that will be taken to avoid and minimize both short- and long-term adverse impacts to water quality, aquatic resources, and other resources. Propose mitigation to compensate for unavoidable impacts. Commit to these measures and mitigation in the Record of Decision (ROD).

Air Quality

The DEIS does not include an evaluation of existing air quality within the geographic scope of the project and does not examine the potential impacts to air quality from the project. Such an evaluation is necessary to assure compliance with State and Federal air quality regulations, and to disclose the potential impacts from temporary or cumulative degradation of air quality. The DEIS includes environmental measures proposed by SFWPA and FERC staff (Sections 2.2 and 2.3) that have the potential to impact air quality from construction, maintenance, or operational activities. Those impacts are not evaluated.

Additionally, environmental analyses from a recommended fire management and response plan (Measure 55) within the project boundary are not included in the DEIS. The U.S. Forest Service conditions specify that SFWPA file a fire prevention and response plan within 1 year of license issuance.

Recommendation:

- The FEIS should include a discussion of existing air quality and conformity with State and Federal air regulations. It should describe and estimate air emissions from

potential construction and other activities, as well as proposed mitigation measures to minimize those emissions. Include an analysis of impacts expected from implementation of a fire management and response plan.

Endangered Species Act (ESA)

As part of the environmental analysis of Threatened and Endangered Species (Section 3.3.4), the DEIS concludes that the project may affect the valley elderberry longhorn beetle and the California red-legged frog (pg. 3-130). Neither Section 3.3.4 nor the Comparison of Effects of Proposed Action and Alternatives (Section 5.0) include a discussion of the project's compliance with Section 7 of the ESA.

Recommendation:

- The FEIS should include a discussion of how the project complies with Section 7 of the ESA. The document should provide an update on the status of consultation with the Fish and Wildlife Service (FWS) regarding impacts to the California red-legged frog and valley elderberry longhorn beetle and include the Biological Opinion if one has been issued by FWS.

Cumulative Impacts Analysis

Cumulative Impacts of the Project

Cumulative impacts are defined in the CEQ NEPA regulations as the impact on the environment that results from the incremental impact of the action when added to the other past, present, and reasonable foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such actions (40 CFR 1508.7). The DEIS does not sufficiently evaluate the potential cumulative effects from the project on resources in the surrounding area other than aquatic resources, nor does the DEIS sufficiently describe impacts to resources from other projects or activities within the identified geographic and temporal scope of the project (pg. 3-2).

Recommendations:

- EPA recommends using the California Department of Transportation Indirect and Cumulative Impacts Analysis, which is co-authored by EPA and is applicable to impact analyses for both road and non-road projects. This guidance can be found at [http://www.dot.ca.gov/ser/cumulative_guidance/purpose.htm] and [http://www.dot.ca.gov/ser/Growth-related_IndirectImpactAnalysis/gri_guidance.htm].
- The FEIS should provide a substantive discussion of, and quantify where possible, the cumulative effects of the project when considered with other past, present, or reasonably foreseeable projects, regardless of what agency or person undertakes those actions (see 40 CFR Section 1508.7). The document should also propose mitigation for all cumulative impacts, and clearly state the lead agency's mitigation responsibilities and the mitigation responsibilities of other entities.

Cumulative Effects of Climate Change

The discussion of cumulative effects in the DEIS does not mention the potential cumulative effects of climate change on the project area and how this may affect the operation of the proposed project. While it may be difficult to predict specific climate change effects, they should be identified and discussed to the extent possible, especially considering the long term nature of the proposed relicensing. A number of studies specific to California have indicated the potential for significant environmental impacts as a result of changing temperatures and precipitation.[1]

The Government Accountability Office recently released a report entitled, "Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources" (August 2007). According to the GAO report, federal land and water resources are vulnerable to a wide range of effects from climate change, some of which are already occurring.

Based on the freshwater ecosystem case study in the GAO report, possible effects to the proposed project could include average temperature increases in Spring with earlier initial and maximum snow melt and higher water levels; vulnerability to fire due to evaporative stress (drying) from more hot days; changing precipitation patterns with more rain and less snow in winter causing winter streamflows to increase; decreased snowpacks and altered timing of spring runoff; larger and more severe storms and lightning causing more forest fires and drier conditions feeding larger, more intense wildland fires; warming temperatures and more severe drought with increased risk of insects and diseases to trees; possible increases in invasive species, and warmer stream temperatures negatively affecting aquatic organisms and fish species that thrive in cold water.

Recommendation:

- We recommend the FEIS include a discussion of climate change and its potential effects on the proposed action and on the action's impacts. We recommend this discussion include a short summary of any applicable climate change studies, including their findings on potential environmental and water supply effects and their recommendations for addressing these effects.

Implementation of Adaptive Management

Adaptive management is an iterative process that requires selecting and implementing management actions, monitoring, comparing results with management and project objectives, and using feedback to make future management decisions. The process recognizes the importance of continually improving management techniques through flexibility and adaptation

[1] For example: Our Changing Climate: Assessing the Risks to California, A Summary Report from the California Climate Change Center, July 2006; Climate Change and California Water Resources, Brandt, Alf W.; Committee on Water, Parks & Wildlife, California State Assembly, March 2007.

instead of adhering rigidly to a standard set of management actions. Although adaptive management is not a new concept, it may be relatively new in its application to specific projects. As stated in a recent Council on Environmental Quality (CEQ) report, Modernizing NEPA, the effectiveness of adaptive management monitoring depends on a variety of factors including:

a) The ability to establish clear monitoring objectives;
b) Agreement on the impact thresholds being monitored;
c) The existence of a baseline or the ability to develop a baseline for the resources being monitored.
d) The ability to see the effects within an appropriate time frame after the action is taken;
e) The technical capabilities of the procedures and equipment used to identify and measure changes in the affected resources and the ability to analyze the changes;
f) The resources needed to perform the monitoring and respond to the results.

Recommendation:

- EPA recommends that the SFWPA consider adopting and describing in the FEIS a formal adaptive management plan to ensure implementation of mitigation measures and to provide flexibility to meet changing needs. Action alternatives would incorporate the principles of adaptive management by using monitoring and evaluation to determine if management actions were achieving objectives, and adjusting actions accordingly. EPA recommends that SFWPA review the specific discussion on Adaptive Management in the NEPA Task Force Report to the Council on Environmental Quality on Modernizing NEPA.