

CALIFORNIA ENERGY COMMISSION

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April 19, 2007

Ms. Philis Posey
Acting Secretary
Federal Energy Regulatory Commission
888 First Street NE – Room 1A
Washington, DC 20246

Via E-Filing

RE: Klamath Hydroelectric Project (FERC Project No. 2082). California Energy Commission Response to PacifiCorp's Comments on the Klamath Project Alternatives Analysis Model and Consultant Report

Dear Ms. Posey,

On December 1, 2006, California Energy Commission staff provided comments on the Draft Environmental Impact Statement (DEIS) for Federal Energy Regulatory Commission (FERC) Project No. 2082, the Klamath Hydro Project owned by PacifiCorp. As part of the DEIS comments, Energy Commission staff submitted to the FERC National Environmental Policy Act (NEPA) record a consultant report entitled: *Economic Modeling of Relicensing and Decommissioning Options for the Klamath Basin Hydroelectric Project*¹ (*Klamath Consultant Report*).

On March 12, 2007, PacifiCorp submitted a critique of the *Klamath Consultant Report* to FERC that was prepared by the economics consulting firm Christensen Associates Energy Consulting (CAEC) of Madison, Wisconsin.²

Energy Commission staff has prepared a response to the PacifiCorp critique and submits it to the FERC NEPA record for the Klamath Hydro Project Relicensing Proceeding. The response materials include an *Addendum* to the initial *Klamath Consultant Report* and an updated version of the Klamath Project Alternatives Analysis Model (KPAAM) spreadsheet model entitled KPAAM2. These documents are also available on our website, <http://www.energy.ca.gov/klamath>, along with other Energy Commission Klamath materials.

¹ *Economic Modeling of Relicensing and Decommissioning Options for the Klamath Basin Hydroelectric Project*, California Energy Commission Consultant Report, Publication No.700-2006-010, November 2006.

² *Evaluation of the Klamath Project Alternatives Analysis Model*, Christensen Associates Energy Consulting LLC, Madison, Wisconsin, March 2007.

California Energy Commission Commitment to Transparent Public Proceedings on Energy Matters

As a public energy agency committed to developing the best possible economic and energy analyses to inform the FERC NEPA record for the Klamath Project Relicensing Proceeding, the Energy Commission welcomes public scrutiny and comment on all of its public documents. Such reviews are an integral and vital part of our agency's own public proceedings on energy matters. In this case, they help ensure a transparent public record and help foster public debate on the appropriate methods, assumptions and cost inputs to use on analyses like the *Klamath Consultant Report*.

The PacifiCorp-CAEC critique contains some useful observations and corrections to KPAAM, many of which are incorporated into a revised run of the model. However, the critique also contains many misinterpretations and factual misrepresentations of KPAAM and Klamath Project operations. Many assumptions and cost inputs used in KPAAM are labeled as "errors" by PacifiCorp and its consultant when in fact they are appropriate for the analysis, and represent the best available public data or assumptions used by the government agencies to represent probable mandatory mitigation conditions.

PacifiCorp and its consultant conclude that the *Klamath Consultant Report* contains "biases" and "flaws" that render it unsuitable for "providing an adequate assessment of whether the Klamath Project should be relicensed." These assertions are without merit and not supported by the facts and analyses contained in the PacifiCorp-CAEC critique.

In accordance with our commitment to assist FERC in developing the best possible energy and project economic information for the Klamath Relicensing Proceeding, Energy Commission staff has worked with our consultant M.Cubed and the Department of Interior Office of Policy Analysis to respond to the critique. M.Cubed has incorporated the appropriate revisions identified in the PacifiCorp-CAEC critique into a second run of KPAAM entitled KPAAM2. This *Addendum* to the original *Klamath Consultant Report Results* contains results from KPAAM2 and responses to the PacifiCorp-CAEC critique.

Summary of Key Findings from the Addendum and KPAAM2

Based on the information provided by PacifiCorp and its consultant, KPAAM has been revised and several cost inputs, model formulas and assumptions modified. Results of KPAAM2 are generally consistent with the results of the initial model run, which found that for a broad range of assumptions and replacement power forecasts, it would generally be more cost effective to decommission rather than relicense the Klamath Hydro Project. KPAAM2 results affirm that decommissioning the Klamath Hydro Project and procuring replacement power for 30 years would be less costly to PacifiCorp and its ratepayers than relicensing the project and mitigating its impacts.

Total net present value of the extensive mitigation measures likely to be required to reduce environmental damage from the 169 megawatt (MW) Klamath Hydro Project now range from \$223 to \$415 million, with a midline estimate of \$320 million. Using the information from PacifiCorp's consultant, KPAAM2 shows that economic benefits to PacifiCorp ratepayers from the decommissioning option are higher than originally forecast, and would range from \$32 million to \$286. For the midline case using PacifiCorp's own replacement power forecast, it would be \$114 million less costly to decommission rather than relicense the Klamath Hydro Project.

Energy Commission staff also confirms that the characterizations of the Klamath Hydro Project's operations and energy values presented in the *Klamath Consultant Report* are accurate. The report describes the facility's current operational constraints, low firm capacity values, nominal contributions to PacifiCorp's ability to serve customer load, and the increased future operational constraints from likely relicensing conditions. The report concludes that electricity replacement options for a decommissioning scenario are readily available, and that loss of some or all of the facility's generation would not significantly affect PacifiCorp's ability to serve customer load. These facts are not materially contravened by any information in the PacifiCorp consultant report.

Relicensing with the associated mitigation costs creates the highest risk for PacifiCorp ratepayers. The engineering and scientific issues associated with trying to maintain power production and mitigate impacts are complex and expensive. PacifiCorp's ratepayers will bear the greatest economic risk for unsuccessful mitigation strategies aimed at fisheries and water quality. PacifiCorp shareholders and ratepayers risk not recouping all of the potential costs associated with long-term mitigation and power production, especially if a lower cost, biologically superior project option has been identified in the NEPA record. Ultimately, the Oregon and California Public Utilities Commissions will determine the accurateness of the cost accounting and make final determinations on appropriate cost recovery in their general rate case proceedings.

Energy Commission Perspective on Klamath

At this point in the Klamath Relicensing Proceeding, state and federal fisheries, wildlife and water quality agencies have developed an extensive scientific record documenting the environmental damage to regionally significant populations of imperiled salmonids from historic operation of the Klamath Hydro Project. These scientific findings were confirmed by the trial judge in the administrative hearings conducted pursuant to the Energy Policy Act in August 2006.

Our agency's own investigations into the energy values associated with the project document that this 169 MW hydroelectric facility is a nominal energy resource that contributes a modest two percent to PacifiCorp's total electricity supply. Project operations and dispatch flexibility are highly constrained by Bureau of Reclamation operations, and would be further constrained by the likely mitigation measures imposed by FERC and other agencies. Replacement power for the project's intermittent, non-

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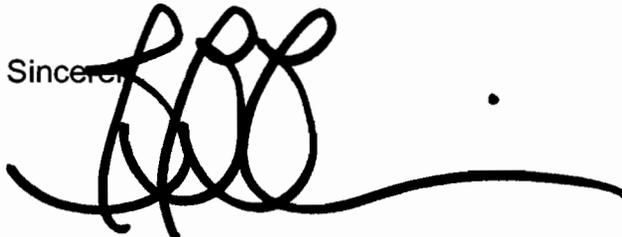
firm power is readily available from thermal and renewable resources in the Pacific Northwest. Based on this information, we question the wisdom of investing hundreds of millions in ratepayer money to sustain a nominal and environmentally damaging power plant, especially when lower cost, environmentally superior project alternatives are available.

The opportunity costs for alternative investments of this ratepayer money are substantial. For example, for \$320 million a 170 MW wind farm could be constructed that produces intermittent, emissions-free electricity. For \$350 to \$400 million, developers in California are constructing state-of-the-art 500 MW natural gas-fired combined cycle power plants that meet our state's tough air quality standards and produce firm power with some dispatch flexibility.

FERC's relicensing proceeding for the Klamath Hydro Project presents a unique opportunity to help restore the historically significant runs of salmon and steelhead to the Klamath River Basin. Low power-high environmental impact power plants like Klamath require significant and unique energy benefits to justify their continued operations. Energy policies in California are creating fleets of modern, cost-effective power plants that minimize damage to the environment and maintain electric system reliability, greatly reducing the need for outmoded, environmentally damaging facilities such as the Klamath Hydro Project.

Thank you for the opportunity to provide additional comments on the DEIS for the Klamath Hydroelectric Project. The Energy Commission will continue to provide its energy and economic expertise to FERC and the other state and federal agencies involved with the Klamath Relicensing Proceeding. Please contact Terrence O'Brien, Deputy Director, Energy Facilities Siting Division, at 916-654-3933, or by email at tobrien@energy.state.ca.us, if you have any questions or require further information.

Sincerely,

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.

B.B. BLEVINS
Executive Director

CC: Mr. Michael Chrisman
Secretary, California Resources Agency

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Mr. Ryan Broddrick
Executive Director, California Department of Fish and Game

Ms. Dorothy Rice
Executive Director, California State Water Resources Control Board

Mr. Michael Graine
Director, Oregon Department of Energy

Mr. Steve Thompson
California and Nevada Operations Manager, U.S. Fish and Wildlife Service

Mr. Rodney R. McInnis
Regional Administrator, United States Department of Commerce
National Oceanic and Atmospheric Administration,
National Marine Fisheries Service

Mr. James Lecky
Director, Protected Resources Division, United States Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

Mr. Cory Scott
Klamath Relicensing Project Manager, PacifiCorp

Attachments:

Attachment 1: Addendum to *Economic Modeling of Relicensing and Decommissioning Options for the Klamath Basin Hydroelectric Project*

Attachment 2: KPAAM2 Excel Spreadsheet Model