



United States  
Department of Agriculture  
Forest Service

Shasta-Trinity National Forest  
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File Code: 2770

Date: December 23, 2004

Richard Ely  
Davis Hydro, LLC  
27264 Meadowbrook Drive  
Davis, CA 95616

Dear Mr. Ely:

Enclosed is the Forest Service response to your First Stage Consultation Package for the Proposed Pit 4 Dam Retrofit (FERC #12491) Hydroelectric Project located on the Pit River in Shasta County, California, pursuant to Code of Federal Regulations (CFR) 16.8 (b)(4). We are responding within 60 days of the public meeting of November 4, 2004, per the above referenced regulations.

Most of the Pit 4 facilities and the river reach are on National Forest system (NFS) lands. The Forest Service has the authority under Section 4(e) of the Federal Power Act to stipulate License conditions to provide for the adequate protection and utilization of the National Forests and to ensure that the License will not interfere or be inconsistent with the purpose for which the National Forests were created. The Forest Service also has the responsibility to ensure consistency with the National Forest Management Act, which requires that use of National Forest System lands be consistent with direction contained in the "Shasta-Trinity National Forests Land and Resources Management Plan" (LRMP), April 1995 and the April 1994 "Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl" (ROD or Northwest Forest Plan) which was incorporated into the Shasta-Trinity LRMP. Additionally, Executive Orders, other Records of Decisions, regulations, and policies are pertinent to the Forest Service role in hydroelectric relicensing.

As you know, the Pit 4 dam is part of the FERC #233 license owned by PG&E. PG&E is currently seeking a new license for the project and, as part of the licensing process, conducted many studies within the project area. Subsequently, the Pit River Collaborative Team (PRCT) reached consensus, in the form of an agreement, on a submittal of specific conditions for the new license. The agreement, as it relates to the Pit 4 dam and reach, specifies protocols for water releases at the Pit 4 Dam, instream flows for the Pit 4 reach, out-of-season spill flow operations, ramping rates and streamflow information. This agreement was submitted for consideration to the FERC by members of the PRCT, including the Forest Service.



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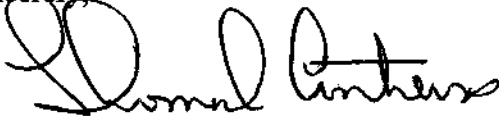


The attached document contains two sections:

- **Part I** - general and specific comments on the First Stage Consultation Document.
- **Part II** - a listing of our proposed study/information needs. It addresses the six criteria listed in 18 CFR 16.8 (b) (4).

We appreciate this opportunity to comment on the proposed dam retrofit. We look forward to working with you on the licensing. If you have any questions concerning this document, please contact FERC Coordinator Kathy Valenzuela at (530) 275-1587.

Sincerely,



For

J. SHARON HEYWOOD  
Forest Supervisor

Enclosure

## PART I

### COMMENTS ON FERC PROJECT PRELIMINARY PERMIT P-12491 FIRST STAGE CONSULTATION PACKAGE

**General Comment:** The document does not mention that the project must obtain a Forest Service Special Use Authorization in order to conduct studies, if any, and to construct and operate the project. The PG&E project is under an existing FERC license. Any new project must have this authorization in addition to any license.

**Page 1, Background Section:** You indicate that the meeting minutes from the 9/20/04 meeting with the Forest Service are in Attachment 1. These minutes are not in the package.

**Page 2, Environmental Resources:** We agree that the final Terms and Conditions as put forward by the Forest Service should not be impacted by this new project. The terms and conditions include requirements relating to the Pit 4 dam and reach such as protocols for releases at the Pit 4 Dam, instream flow for the Pit 4 reach, out-of-season spill flow operations, ramping rates, and streamflow information. While these were submitted to the FERC, the new license has not been issued and it could be somewhat different based upon the State Water Resources Control Board Section 401 certification. The Forest Service will provide additional comments concerning possible impacts and request studies based upon any new information in the future Project 233 license.

**Page 3, Historical and Archaeological:** More information should be provided concerning the effects of the new project structures to the historic Pit 3, 4, and 5 structures. This would be in the form of Section 106 consultation and would require more details about the new structure components such as materials, colors, and architectural design. The FERC is the responsible federal agency for the Section 106 consultation.

**Page 3, Natural Resources, Scenic Beauty and Aesthetics:** As stated in the paragraph above, more information is needed concerning the design and materials for the new structures in order for the Forest Service to evaluate the project in relation to its Scenery Management System (formerly Visual Quality Management) and provide suggestions and mitigations.

**Page 4, Animal Resources:** There is a lack of detail concerning mitigating impacts to nesting bald eagles and to northern spotted owl habitat – both listed species. This project will require a Biological Assessment to be prepared for submission to the USDI - Fish and Wildlife Service (FWS). The FWS will issue a Biological Opinion on the effects to listed species. The FERC is the responsible federal agency for this consultation. We suggest the following standard mitigations: limited operating period (LOP) between January 1 and August 15 (prohibition during that time on

heavy equipment noise or other construction noise above ambient noise levels) due to nesting bald eagles. Also, due to the area designation as a Late Successional Reserve for the northern spotted owl, the following mitigation is usually proposed: an LOP between February 1 and July 15 for disturbance within the territory and an LOP between February 1 and September 15 if habitat removal is proposed (tree cutting, vegetation modification).

**Page 4, Fish Populations:** The Forest Service is concerned about the project impacts to fish populations due to changes in the water temperature for the instream flow releases. This could cause unacceptable instream temperatures for cold-water fish and other species.

The hardhead (*Mylopharodon conocephalus*) and the rough sculpin (*Cottus asperimus*) are fish species of concern to the Forest Service and are classified as a "Forest Service Sensitive Species". We are concerned about entrainment of these species in the intake structure. More details are requested about any fish screens or structures that would reduce the fish mortality caused by the project.

Short-term impacts due to construction activities are not acknowledged nor addressed. These could include sediment and release of toxic substances into the water (cement, vehicle fluids). Please provide more detailed information as to construction methods and preventing spills or waste from entering the river.

**Page 4, Recreation:** As stated above, there will be short-term impacts on recreation due to the projects. We foresee that visitors who currently use the roads to access the National Forest and those who recreate in the immediate area of the dam will be impacted due to construction. We would like more detailed information about methods to notify visitors of any delays, closures, and safety messages (increased construction traffic).

**Page 5, General Design:** comment about the use of the term, "fish release". The water released is to benefit many resources. We prefer the use of the term, "instream flow release".

**Page 5, The Fixed Trash Rack:** The Forest Service will not allow the use of the National Forest for disposal of debris unless locations and methods are agreed to in advance. Locations for this type of use are limited in the Pit reaches. We suggest you seek disposal sites on non-NFS lands.

**Page 6, Powerhouse:** based upon your siting of the structures, we have a concern over the stability of the upstream banks. These exposed banks are notoriously unstable and frequently require artificial stabilization methods. We would like more details about stabilization to assure that the project will not contribute to additional sedimentation and to evaluate the effects to the visual quality of the area.

The Forest Service wants to be involved with the design of the powerhouse and supporting structures prior to submission to the SHPO. As stated previously in this document, impacts to the visual quality are important and may be mitigated to some degree by the use of certain materials, colors, and designs.

Page 7, Construction Practice: as stated in previous paragraphs, we would like more details of the actual construction portion of the project to be assured that waters and lands are protected from spills and hazardous waste. See also, our comments about specific limited operating periods (LOPs).

Page 7, Generators and Interconnection: while it may be inferred or assumed, the Forest Service wants to guarantee the safety of company employees and visitors in the design and operation of all electrical structures.

Attachment V Working Service List: the Shasta-Trinity Forest Supervisor's name is spelled "Heywood". Under Mrs. Kathy Valenzuela, the correct agency is "Forest Service" not National Forest Service.

**PART II**  
**INFORMATION NEEDS OR STUDIES REQUESTED**

1. **ID STUDY OR INFORMATION NEED:** Temperature Effects to Instream Flow Releases Specific to the Davis Hydro Project
  - 1.1 **BASIS FOR STUDY:** Required to determine degree of compliance with Aquatic Conservation Strategy objectives (especially #2, 6, and 7) and to develop measures that will respond to the Northwest Forest Plan and the Forest Plan (Ref. Shasta-Trinity LRMP, p. 4-18, para 9.a., 9.b.). Needed to better understand the effects that utilizing the instream flow release waters of the 233 project will have on the temperature of those waters when it is returned to the project reaches of the Pit River system and to determine what extent this may affect aquatic habitat.

The Forest has a number of wildlife species classified as Forest Service Sensitive residing within the project area that will need full consideration during this licensing process. Of particular concern are hardhead and sculpin but not to the detriment of other species. Temperature modeling would display how the aquatic environment would be impacted especially in the June-September period.
  - 1.2 **STUDY METHODOLOGY:** Model or project June to September temperatures of instream flow release water at flows currently projected for the new license to examine effects to aquatic habitat for a variety of species. Utilize existing data from the recent P-233 relicensing effort.
  - 1.3 **RESOURCE GOALS & OBJECTIVES:** Meeting Aquatic Conservation Strategy objectives; water quality; aquatic and riparian habitat; management of TES and Sensitive species.
  - 1.4 **ACCEPTED PRACTICE:** Review the temperature study for the Pit 3, 4, and 5 P-233 license for information and coordinate with FS, California Fish and Game, and US Fish and Wildlife Service to assure concurrence with protocols and requirements.
  - 1.5 **USEFULNESS OF INFO:** The modeling results will allow for a more thorough analysis of effects on habitats that could be attributed to this project. The results will lead to a better understanding of the effects of diversions on summer flows and will support the development of more ecologically and biologically effective 4(e) conditions.

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