FEDERAL ENERGY REGULATORY COMMISSION
Washington, D. C. 20426

OFFICE OF ENERGY PROJECTS

FERC No. 2299 - 057
Don Pedro Project
Turlock Irrigation District
Modesto Irrigation District

DEC 20 2006

Larry Weis, General Manager
Turlock Irrigation District
P. O. Box 949
Turlock, CA 95381

Allen Short, General Manager
Modesto Irrigation District
P. O. Box 4060
Modesto, CA 95352

Subject: Fisheries Monitoring Under Article 58

Dear Messrs. Weis and Short:

Article 58 of your license required you to conduct 10 years of monitoring studies to assess the condition of the chinook salmon population in the Tuolumne River 1/. It includes a provision that allows the Commission to determine if further monitoring studies and changes in project structures and operations are needed to protect fishery resources in the Tuolumne River, after notice and opportunity for hearing.

You filed the 10-Year Monitoring Summary Report required by Article 58 on March 25, 2005. We noticed the filing of the report and requested comments from interested parties. We received comments and recommendations from resource agencies, local governments, and non-governmental organizations. We also received several requests for intervention.

We evaluated the report, and the comments and recommendations filed by the resource agencies and interveners, as well as your responses to these comments and recommendations. We presented our preliminary findings at a public meeting in Sacramento, California, on July 25, 2006. The meeting also provided an opportunity for

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1 See the July 31, 1996, Order Amending License (76 FERC ¶ 61,117)

those in attendance to raise questions and make comments on the summary report and to bring forth new information. We established September 25, 2006, as the deadline for filing any additional information or comments about the results of the 10-Year Summary Report, or about any new information presented at the meeting.

We received a September 21, 2006, letter from the California Department of Fish and Game (CDFG) that informed us a follow-up meeting of the interested parties had been held on August 15, 2006. Those in attendance discussed a new scientific approach to fisheries monitoring in the Tuolumne River. The proposal would "define a collaborative approach to reconciling the existing science and developing additional fisheries information."

The CDFG letter included a signature page for all interested parties to sign to show their support for the proposal; the letter also requested additional time to file comments and recommendations arising from the July meeting. The CDFG urged us to regard the overall process of developing sound fisheries science for the project as being "ongoing, collaborative, and adaptive" rather than a completed process that concluded with filing of the 10-Year Summary Report. We have not received any additional filings on this matter since the September 21, 2006 letter, nor have we been advised of any meetings. It appears that progress on this proposal for a new process has stalled.

Our general conclusion about the 10-Year Summary Report, as presented at the meeting, is that for most of the required monitoring, the data were insufficient to reach any valid conclusions about the effects of the modified streamflow releases and restoration efforts on the fisheries resources of the Tuolumne River. Some of the monitoring efforts were improperly designed or executed and could not, therefore, produce data that would allow valid conclusions. Some of the mitigative measures simply have not had sufficient time for the monitoring efforts to show any change, or the response was not great enough to detect.

Therefore, we conclude that under Article 58 of the license, further monitoring studies are needed. Additional, well-designed and well-executed studies are necessary before the effectiveness of the revised flow schedule and the non-flow mitigative measures can be determined. A study plan and schedule for the additional monitoring is needed to address (at a minimum) the following tasks:

Instream Flow

There is a lack of evidence that either smolt survival or spawner escapement has increased in response to the increased flow requirements. The collection of additional data is needed to better define the flow to survival relationship; in particular, data points are needed for high flow years (i.e., greater than 4,000 cfs). Coded-wire-tag studies and

improvements in screw trap methodology are needed to more accurately estimate smolt survival and production. The effects of releasing the spring pulse flows in a more natural pattern based on water year type, rather than releasing them at the same time every year, should be assessed.

Habitat Restoration

The remaining habitat restoration projects should be completed and the effectiveness of all projects should be assessed. A study to evaluate spawning habitat quality, using egg survival to emergence, gravel size and type, sedimentation, and flow penetration of spawning beds is needed. Additional efforts to increase spawning habitat utilization and to reduce redd superimposition by flow management, gravel restoration, and gravel addition in upstream areas is needed. The level of use of restored areas for spawning should be assessed.

Fry Survival

A statistically valid estimate of fry production per female spawner and of fry distribution is needed, and should include site-specific fry emergence, fry distribution over time, and fry transport relative to flow.

Steelhead Presence/Protection

The size and habitat needs of the *Oncorhynchus mykiss* population in the Tuolumne River, and the presence of anadromous members (steelhead trout) of this population should be determined. The use of steelhead trout data from nearby rivers should be employed for comparative purposes. Additional studies on the flow and habitat needs of steelhead trout will be needed if they are present in the Tuolumne River population of *Oncorhynchus mykiss*; these additional study elements should be described in the study plan.

Predator Control

The reduction of predation on juvenile salmon by other species will improve smolt survival. An identification and implementation of measures to this end, and the monitoring of the effectiveness of these measures are needed.

River Temperature

The effect of project operations on river temperatures and the resulting effect on the fisheries resources should be assessed. The development of a thermal model for the

Tuolumne River would allow the flow-temperature relationship to be better understood. The study should include an analysis of how conditions in the Delta might affect the success of any measures taken to improve thermal conditions in the Tuolumne River.

The study plan to address the above tasks should be developed in cooperation with the Tuolumne River Technical Action Committee (TRTAC), the National Marine Fisheries Service (NMFS), and representatives of the non-governmental organizations (NGOs) that have participated in these proceedings. You should include with the plan documentation of consultation with the TRTAC, NMFS and the NGOs, copies of comments and recommendations on the plan, and specific descriptions of how the TRTAC, NMFS and NGOs' comments are accommodated by the plan. You should allow a minimum of 30 days for the TRTAC, NMFS and the NGOs to comment and to make recommendations, before filing the plan with the Commission. If you do not adopt a recommendation, the filing should include your reasons, based on project-specific information.

Within 90 days of the date of this letter, file an original and seven copies of your study plan and schedule for Commission approval to:

Office of the Secretary
Federal Energy Regulatory Commission
888 First Street, Northeast
Washington, D. C. 20426

A copy of the plan should be sent under separate cover to:

Mr. Philip Scordelis
FERC, DHAC
901 Market Street, Suite 350
San Francisco, CA 94103

If you have any additional information or questions about these matters, contact Mr. Scordelis at (415) 369-3335.

Sincerely,

George H. Taylor, Chief
Biological Resources Branch
Division of Hydropower Administration
and Compliance

cc:

Donn W. Furman, Deputy City Attorney
Office of City Attorney
1390 Market Street, Suite 418
San Francisco, CA 94102

Michael Carlin
Assistant General Manager, Water
1155 Market Street, 11th Floor
San Francisco, CA 94103

Richard Roos-Collins
Julie Gantenbein
Natural Heritage Institute
100 Pine Street, Suite 1550
San Francisco, CA 94111-5117

David Boucher
Stanislaus Fly Fishermen
7523 Meadow Avenue
Stockton, CA 95207

Ray E. McDevitt
San Francisco Bay Area Water Users Assoc.
Hanson Bridget Marcus Vlahos & Rudy, LLP
333 Market Street, 21st Floor
San Francisco, CA 94105-2173

Allison Boucher
Friends of the Tuolumne
7523 Meadow Avenue
Stockton, CA 95297

State of California
Department of Fish and Game
Region 4
1234 East Shaw Avenue
Fresno, CA 93710

Harllee Branch, Staff Counsel
California Dep. of Fish and Game
Office of General Counsel
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Field Supervisor
Ecological Services
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

Regional Administrator
National Marine Fisheries Service
Southwest Region
501 West Ocean Blvd., Suite 4200
Long Beach, CA 90802

U.S. Department of the Interior
Office of the Secretary
Office of Environmental Policy and Compliance
1111 Jackson Street, Suite 520
Oakland, CA 94607-4807

U.S. Department of the Interior
Office of the Solicitor
Pacific Southwest Region
2800 Cottage Way, Room 325
Sacramento, CA 95825-1890

Richard Butler, Supervisor
Santa Rosa Area Office
National Marine Fisheries Service
Federal Building, Room 325
777 Sonoma Avenue
Santa Rosa, CA 95404