

FEDERAL ENERGY REGULATORY COMMISSION

Washington, DC 20426

April 8, 2011

OFFICE OF ENERGY PROJECTS

Project No. 2299-075 – California
Don Pedro Hydroelectric Project
Turlock Irrigation District
Modesto Irrigation District

Subject: Scoping Document 1 for the Don Pedro Hydroelectric Project, P-2299

To the Party Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing the Pre-Application Document submitted by the Turlock Irrigation District and Modesto Irrigation District (Districts) for relicensing the Don Pedro Hydroelectric Project (FERC No. 2299). The Don Pedro Project facilities are located on Tuolumne River in Tuolumne County, California. Portions of the Don Pedro Project occupy lands of the Bureau of Land Management Sierra Resource Management Unit.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff intends to prepare an environmental impact statement (EIS), which will be used by the Commission to determine whether, and under what conditions, to issue a new license for the project. To support and assist our environmental review, we are beginning the public scoping process to ensure that all pertinent issues are identified and analyzed, and that the EIS is thorough and balanced.

We invite your participation in the scoping process, and are circulating the attached Scoping Document 1 (SD1) to provide you with information on the Don Pedro Project. We are also soliciting your comments and suggestions on our preliminary list of issues and alternatives to be addressed in the EIS. We are also requesting that you identify any studies that would help provide a framework for collecting pertinent information on the resource areas under consideration necessary for the Commission to prepare the EIS for the project.

We will hold two scoping meetings for the Don Pedro Project to receive input on the scope of the EIS. A daytime meeting will be held at 9:00 a.m. (PST) on May 11, 2011, at the CSU-Stanislaus, University Student Union-Events Center, 801 W. Monte Vista, Turlock, California. An evening meeting will be held at 7:00 p.m. (PST) on May

11, 2011, at the Double Tree Hotel Modesto, Ballroom 3, 1150 Ninth Street, Modesto, California. We will also visit the project facilities on May 10, 2011 starting at 9:00 a.m. (PST).

We invite all interested agencies, Indian tribes, non-governmental organizations, and individuals to attend one or all of these meetings. Further information on our site visit and scoping meetings is available in the enclosed SD1.

SD1 is being distributed to both the Districts distribution list and the Commission's official mailing list (see section 9.0 of the attached SD1). If you wish to be added to or removed from the Commission's official mailing list, please send your request by email to efiling@ferc.gov or by mail to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1A, Washington, DC 20426. All written or emailed requests must specify your wish to be removed from or added to the mailing list and must clearly identify the following on the first page: **Don Pedro Hydroelectric Project No. 2299-075**.

Please review the SD1 and, if you wish to provide comments, follow the instructions in section 6.0, *Request for Information and Studies*. If you have any questions about SD1, the scoping process, or how Commission staff will develop the EIS for this project, please contact Jim Hastreiter at (503) 552-2760 or james.hastreiter@ferc.gov. Additional information about the Commission's licensing process and the Don Pedro Project may be obtained from our website, www.ferc.gov, or the Districts licensing website, <http://www.donpedro-relicensing.com>

Enclosure: Scoping Document 1

cc: Mailing List
Public Files

SCOPING DOCUMENT 1
DON PEDRO HYDROELECTRIC PROJECT

CALIFORNIA

PROJECT NO. 2299-075



Federal Energy Regulatory Commission
Office of Energy Projects
Division of Hydropower Licensing
Washington, DC

April 2011

TABLE OF CONTENTS

1.0 INTRODUCTION	6
2.0 SCOPING	8
2.1 PURPOSES OF SCOPING.....	8
2.2 COMMENTS, SCOPING MEETINGS, AND SITE VISIT	9
3.1 NO-ACTION ALTERNATIVE.....	11
3.1.1 Existing Project Facilities	11
3.1.2 Existing Project Operations.....	16
3.2 APPLICANT’S PROPOSAL.....	17
3.2.1 Proposed Project Facilities and Operations.....	17
3.2.2 Proposed Environmental Measures	17
3.3 ALTERNATIVES TO THE PROPOSED ACTION.....	17
3.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY.....	18
3.4.1 Non-power License	18
3.4.2 Project Decommissioning.....	18
4.0 SCOPE OF CUMULATIVE EFFECTS AND SITE-SPECIFIC RESOURCE ISSUES.....	18
4.1 CUMULATIVE EFFECTS	18
4.1.1 Resources that could be Cumulatively Affected	19
4.1.2 Geographic Scope	19
4.1.3 Temporal Scope	19
4.2 RESOURCE ISSUES	20
4.2.1 Geologic and Soils Resources	20
4.2.2 Aquatic Resources	20
4.2.3 Terrestrial Resources	21
4.2.4 Threatened and Endangered Species.....	22
4.2.5 Recreation and Land Use.....	22
4.2.6 Cultural Resources	23
4.2.7 Aesthetic Resources	23
4.2.8 Developmental Resources	23
5.0 PROPOSED STUDIES	23
6.0 REQUEST FOR INFORMATION AND STUDIES	24
7.0 EIS PREPARATION SCHEDULE.....	26
8.0 PROPOSED EIS OUTLINE.....	27

9.0 COMPREHENSIVE PLANS 29

10.0 MAILING LIST 31

APPENDIX A—STUDY PLAN CRITERIA

APPENDIX B—PROCESS PLAN AND SCHEDULE

LIST OF FIGURES

Figure 1. Location of the Don Pedro Project (Source: PAD)..... 7
Figure 2. Project facilities for the Don Pedro Project (Source: PAD)..... 15

LIST OF TABLES

Table 1. Districts’s Initial Study Proposals (Source: PAD)..... 24

SCOPING DOCUMENT 1

Don Pedro Hydroelectric Project, FERC No. 2299-075

1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),¹ may issue licenses for terms ranging from 30 to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On February 10, 2011, Turlock Irrigation District and Modesto Irrigation District (Districts) filed a Pre-Application Document (PAD) and Notice of Intent to seek a new license for Don Pedro Hydroelectric Project (FERC Project No. 2299).²

The Don Pedro Project (project) facilities are located on the Tuolumne River in Tuolumne County, California (figure 1). Portions of the Don Pedro Project occupy lands of the Bureau of Land Management Sierra Resource Management Unit.

The Don Pedro Project has an authorized installed capacity of 168.015 megawatts (MW). The average annual generation of the Don Pedro Project is 532,518 megawatt-hours (MWh) (2002-2009). A detailed description of the project is provided in section 3.0.

The National Environmental Policy Act (NEPA) of 1969,³ the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of relicensing the Don Pedro Project as proposed, and also consider reasonable alternatives to the licensee's proposed action. At this time, we intend to prepare an environmental impact statement (EIS) that describes and evaluates the probable effects, including an assessment of the site-specific and cumulative effects, if any, of the proposed action and alternatives. The EIS preparation will be supported by a scoping process to ensure identification and analysis of all pertinent issues.

¹ 16 U.S.C. § 791(a)-825(r).

² The current license for the Don Pedro Project was issued with an effective date of May 1, 1966, for a term of 50 years and expires on April 30, 2016.

³ National Environmental Policy Act of 1969, as amended (Pub. L. 91-190. 42 U.S.C. § 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982).

2.0 SCOPING

This Scoping Document 1 (SD1) is intended to advise all participants as to the proposed scope of the EIS and to seek additional information pertinent to this analysis. This document contains: (1) a description of the scoping process and schedule for the development of the EIS; (2) a description of the proposed action and alternatives; (3) a preliminary identification of environmental issues and proposed studies; (4) a request for comments and information; (5) a proposed EIS outline; and (6) a preliminary list of comprehensive plans that are applicable to the project.

2.1 PURPOSES OF SCOPING

Scoping is the process used to identify issues, concerns, and opportunities for enhancement or mitigation associated with a proposed action. According to NEPA, the process should be conducted early in the planning stage of the project. The purposes of the scoping process are as follows:

- invite participation of federal, state and local resource agencies, Indian tribes, non-governmental organizations (NGOs), and the public to identify significant environmental and socioeconomic issues related to the proposed project;
- determine the resource issues, depth of analysis, and significance of issues to be addressed in the EIS;
- identify how the project would or would not contribute to cumulative effects in the project area;
- identify reasonable alternatives to the proposed action that should be evaluated in the EIS;
- solicit, from participants, available information on the resources at issue, including existing information and study needs; and
- determine the resource areas and potential issues that do not require detailed analysis during review of the project.

2.2 COMMENTS, SCOPING MEETINGS, AND ENVIRONMENTAL SITE REVIEW

During preparation of the EIS, there will be several opportunities for the resource agencies, Indian tribes, NGOs, and the public to provide input. These opportunities occur:

- during the public scoping process and study plan meetings, when we solicit oral and written comments regarding the scope of issues and analysis for the EIS;
- in response to the Commission's notice that the project is ready for environmental analysis; and
- after issuance of the draft EIS when we solicit written comments on the EIS.

In addition to written comments solicited by this SD1, we will hold two public scoping meetings and an environmental site review in the vicinity of the project. A daytime meeting will focus on concerns of the resource agencies, NGOs, and Indian tribes, and an evening meeting will focus on receiving input from the public. We invite all interested agencies, Indian tribes, NGOs, and individuals to attend one or both of the meetings to assist us in identifying the scope of environmental issues that should be analyzed in the EIS. All interested parties are also invited to participate in the environmental site review. The times and locations of the meetings and environmental site review are as follows:

Daytime Scoping Meeting

Date and Time: Wednesday, May 11, 2011, 9:00 a.m. (PST)
Location: CSU-Stanislaus, University Student Union-Events Center, 801 W. Monte Vista, Turlock, California

Evening Scoping Meeting

Date and Time: Wednesday, May 11, 2011, 7:00 p.m. (PST)
Location: Double Tree Hotel - Modesto, Ballroom 3, 1150 Ninth Street, Modesto, California

Environmental Site Review

Date and Time: Tuesday, May 10, 2011, 9:00 a.m. - 4:30 p.m. (PST)
Location: meet at Don Pedro Recreation Agency Headquarters & Visitor Center, 10200 Bonds Flat Road, La Grange, California 95329

Please notify Jim Hastreiter at 503-552-2760 or james.hastreiter@ferc.gov by **May 2, 2011**, if you plan to attend the site visit.

The scoping meetings will be recorded by a court reporter, and all statements (verbal and written) will become part of the Commission's public record for the project. Before each meeting, all individuals who attend, especially those who intend to make statements, will be asked to sign in and clearly identify themselves for the record. Interested parties who choose not to speak or who are unable to attend the scoping meetings may provide written comments and information to the Commission as described in section 6.0. These meetings are posted on the Commission's calendar located on the internet at www.ferc.gov/EventCalendar/EventsList.aspx, along with other related information.

Meeting participants should come prepared to discuss their issues and/or concerns as they pertain to the relicensing of the Don Pedro Project. It is advised that participants review the PAD in preparation for the scoping meetings. Copies of the PAD are available for review at the Commission in the Public Reference Room or may be viewed on the Commission's website directly at http://elibrary.ferc.gov/idmws/search/intermediate.asp?link_file=yes&doclist=13863485. For assistance, contact FERC Online Support at FERCONlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659. A copy of the PAD is also available for inspection and reproduction at the at Districts place of business at the following addresses: Turlock Irrigation District, 333 E. Canal Drive, Turlock, California and Modesto Irrigation District, 1231 11th Street, Modesto, California during normal business hours and in local libraries.

Following the scoping meetings and comment period, all issues raised will be reviewed and decisions made as to the level of analysis needed. If preliminary analysis indicates that any issues presented in this scoping document have little potential for causing significant effects, the issue(s) will be identified and the reasons for not providing a more detailed analysis will be given in the EIS.

If we receive no substantive comments on SD1, then we will not prepare a Scoping Document 2 (SD2). Otherwise, we will issue SD2 to address any substantive comments received. The SD2 will be issued for informational purposes only; no response will be required. The EIS will address recommendations and input received during the scoping process.

3.0 PROPOSED ACTION AND ALTERNATIVES

In accordance with NEPA, the environmental analysis will consider the following alternatives, at a minimum: (1) the no-action alternative, (2) the applicant's proposed action, and (3) alternatives to the proposed action.

3.1 NO-ACTION ALTERNATIVE

Under the no-action alternative, the Don Pedro Project would continue to operate as required by the current project license (i.e., there would be no change to the existing environment). No new environmental protection, mitigation, or enhancement measures would be implemented. We use this alternative to establish baseline environmental conditions for comparison with other alternatives.

3.1.1 Existing Project Facilities (figure 2)

Don Pedro Dam and Reservoir

The primary project feature is Don Pedro Dam, a 1,900-foot-long and 580-foot-high zoned earth and rockfill structure. The top of the dam is at elevation 855 feet.

Don Pedro Reservoir extends upstream for approximately 24 miles at the normal maximum water surface elevation of 830 feet.⁴ The surface area of the reservoir at the 830-foot elevation is approximately 12,960 acres and the gross storage capacity is 2,030,000 ac-ft .

Don Pedro Spillway

Don Pedro spillway is divided into two sections, one gated and one ungated, located immediately adjacent to one another in a saddle area west of the main dam. The gated spillway section is 135-foot-long, with a permanent crest elevation of 800 feet, and

⁴ All elevations are referenced to mean sea level.

includes three radial gates each 45 feet wide by 30 feet high. The ungated spillway is an ogee section 995 feet long with a crest elevation of 830 feet and a top of abutment elevation of 855 feet. The spillway capacity at a reservoir water level of 850 feet is 472,500 cubic feet per second. Flow releases over the ungated ogee-crest section of the spillway have occurred only once since project construction, in early January 1997. Flows at the spillway are released to Gasburg Creek, which in turn flows into Twin Gulch, then back into the Tuolumne River approximately 1.5 miles downstream of the main dam

Outlet Works

The project facilities include a set of outlet works located at the left (east) abutment of the main dam. The outlet works consist of three individual gate housings, each containing two 4-foot-by-5-foot slide gates. The outlet works are situated in a 3,500-foot-long concrete lined tunnel that originally served as the water diversion tunnel during project construction. The inlet to the tunnel has an invert elevation of 342 feet and the outlet, which is located approximately 400 feet downstream of the powerhouse, has an invert of 310 feet. At a reservoir water surface elevation of 830 feet, the total hydraulic capacity of the outlet works is 7,500 cfs.

Power Intake and Tunnel

Flows are delivered from the reservoir to the powerhouse via a 2,960-foot-long power tunnel located in the left (east) abutment of the main dam. The tunnel transitions from an 18-foot 6-inch concrete-lined section to a 16-foot steel-lined section. Emergency closure can be provided by a 21-foot-high by 12-foot-wide fixed-wheel gate that is operated from a chamber at the top of the gate shaft. Flows from the power tunnel are delivered to the four-unit powerhouse and a hollow-jet control valve in the powerhouse.

Powerhouse

Located immediately downstream of the main dam, the Don Pedro powerhouse contains four turbine-generator units and a 72-inch hollow jet valve. The reinforced-concrete powerhouse is 171 feet long, 110 feet high, and 148 feet wide. It houses four Francis turbine generator units with a nameplate capacity of 168 MW and a maximum output at optimum conditions of approximately 203 MW. Combined hydraulic capacity of the four units under maximum head is approximately 5,500 cfs.

The powerhouse also contains a 72-inch hollow jet valve located in the east end of

the powerhouse with a centerline elevation at discharge of 299 feet. The hydraulic capacity of the hollow jet valve is 3,000 cfs. While turbine Units 1 through 3 discharge directly to the river channel, Unit 4 discharges to the outlet works tunnel approximately 250 feet upstream of the tunnel outlet. Water to Unit 4 is delivered through a bifurcation from the hollow jet valve pipe. With Unit 4 in operation, the hollow-jet valve capacity is reduced from 3,000 cfs to 800 cfs. The powerhouse tailwater during turbine operation varies from a low of about 298 feet to a high of about 303 feet under normal operating conditions. The tailwater elevation at the outlet works tunnel is approximately 300 feet.

Switchyard

The project switchyard is located atop the powerhouse at elevation 340 feet. The switchyard provides power delivery and electrical protection to the Districts' transmission systems. The switchyard includes isolated phase buses, circuit breakers, and four transformers that raise the 13.8 kilovolt (kV) generator voltage to 69 kV transmission voltage.

Gasburg Creek Dike

Don Pedro dam spillway discharges into Gasburg Creek. Gasburg Creek dike is located near the downstream end of the spillway, and directs flows from Gasburg Creek into Twin Gulch where spillway discharges join the Tuolumne River approximately 1.5 miles downstream of the Don Pedro powerhouse. Gasburg Creek dike consists of an impervious earth and rockfill dam approximately 75 feet in height, with a slide-gate controlled 18-inch-diameter conduit. The top of Gasburg Creek dike is at elevation 725 feet.

Dikes A, B, and C

The project includes three small embankments—Dikes A, B, and C—constructed in low saddles on the reservoir rim with top elevations of 855 feet. Dike A is located between the main dam and spillway. Dikes B and C are located east of the main dam.

Recreation facilities

The project has three developed recreation areas, Fleming Meadows, Blue Oaks, and Moccasin Point. Primitive and semi-primitive lakeshore camping occurs on much of the rest of its shores. The project provides both floating and shoreline restrooms in addition to those at the developed recreation areas. Facilities also include hazard

marking, regulatory buoy lines, and other open water-based features including houseboat marinas and a marked water-ski slalom course.

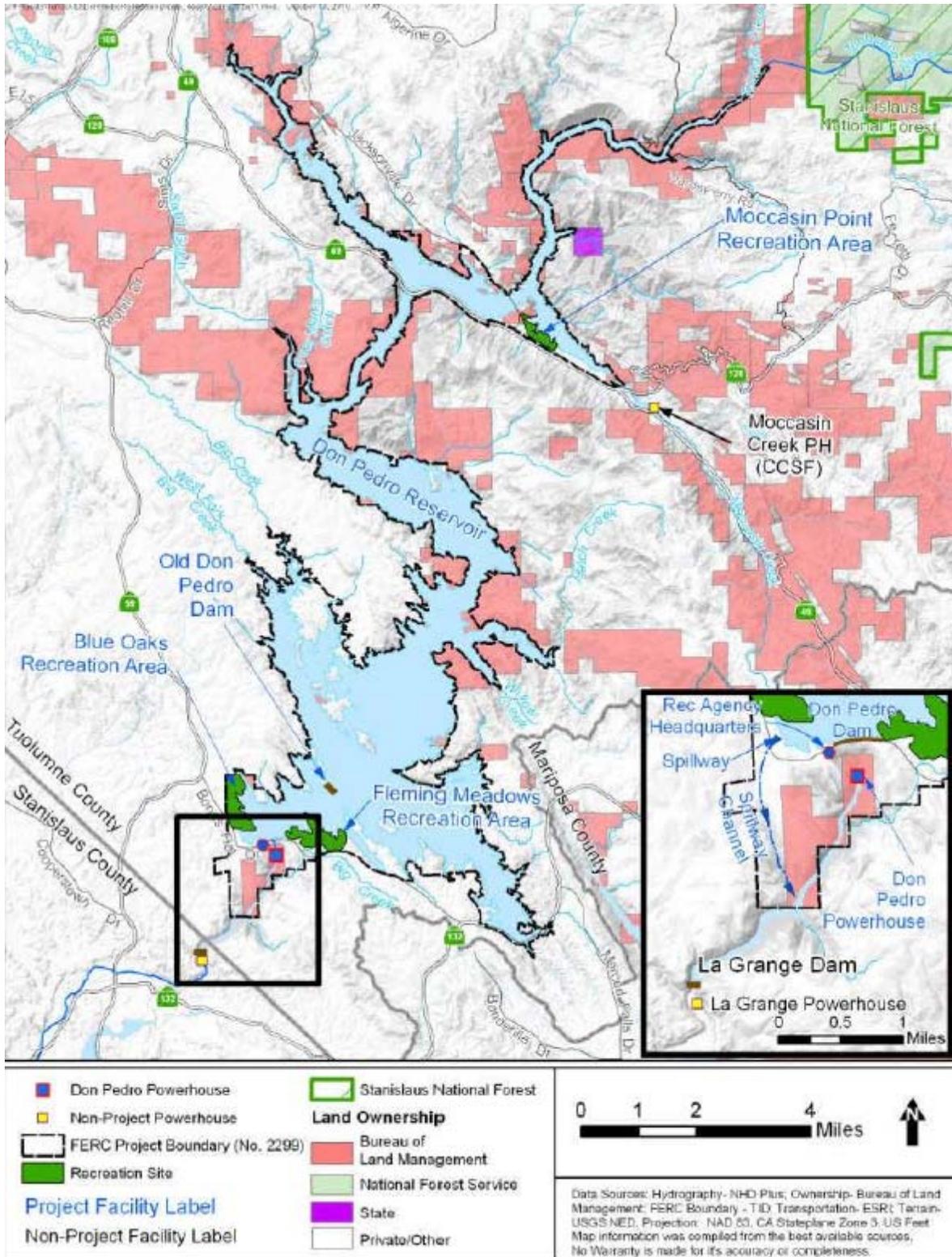


Figure 2. Project facilities for the Don Pedro Project (Source: PAD).

3.1.2 Existing Project Operations

The Don Pedro Project is operated to provide irrigation storage, hydroelectric power, flood control storage, recreation, and municipal and industrial water supply. Power generation varies depending on irrigation, municipal, and industrial water needs, and scheduling is adjusted when possible to release flows with a preference for on-peak rather than off-peak hours.

Don Pedro Reservoir provides 2,030,000 acre-feet of total water storage. In a typical year, storage in Don Pedro Reservoir peaks in mid-summer around early July after the end of snowmelt season. Reservoir water surface elevations are generally maintained as high as possible for summer recreation and then are steadily drawn down as fall approaches. From fall through spring, the Districts maintain 340,000 acre-feet of flood control storage space in the reservoir and adhere to a flood control operations guideline in the Tuolumne River at Modesto of not exceeding 9,000 cfs.

A primary consideration for operations each year is the anticipated water availability in the Tuolumne River watershed and its likely seasonal inflow pattern. The Districts continually track reservoir inflow and outflow to provide the best understanding of overall water availability and predicted inflow to the reservoir. The Districts consider multiple data sources when evaluating water availability in the watershed, including weather forecasts, precipitation, snowpack, and the California Department of Water Resources Bulletin 120 forecasts of reservoir inflow.

The Districts also own La Grange Dam, a non-project diversion dam located on the Tuolumne River 2.3 miles downstream of Don Pedro Dam. The Districts use it to divert water into their canal systems for consumptive purposes upstream of La Grange Dam. Water releases at Don Pedro Dam are also made to deliver flows to La Grange Dam for release to the Tuolumne River below La Grange Dam. The license for the Don Pedro Project requires the Districts to maintain minimum flow releases from the Don Pedro Project to the Tuolumne River, as measured downstream of La Grange Dam, for the benefit of fishery resources.

The project is hydrologically linked with the City and County of San Francisco's upstream Hetch Hetchy System, a series of reservoirs, diversion conduits, and powerhouses located on the Upper Tuolumne River.⁵ The Hetch Hetchy system regulates

⁵ The Hetch Hetchy System is not a part of the licensed project. The System is owned and operated by San Francisco pursuant to authority conferred in the Raker Act. 38 Stat. 242

inflows to the project. San Francisco agreed to help finance construction of the project in return for storage rights in the project reservoir, from which it could provide the Districts with the irrigation water to which their senior water rights entitle them. This allows San Francisco to use a greater portion of its upstream storage reservoirs for municipal water supply.

3.2 APPLICANT'S PROPOSAL

The proposed action is to continue to operate and maintain the project, and implement certain environmental protection, mitigation, and enhancement measures. The Districts propose no new developments or changes in project operation at this point in the licensing process. The current license for the project expires on April 30, 2016.

3.2.1 Proposed Project Facilities and Operations

No new or upgraded facilities, structural changes, or operational changes to the project during the term of the new license are proposed at this time.

3.2.2 Proposed Environmental Measures

At this time, the Districts have not identified measures to protect and enhance environmental resources of the project area.

3.3 ALTERNATIVES TO THE PROPOSED ACTION

Commission staff will consider and assess all alternative recommendations for operational or facility modifications, as well as protection, mitigation, and enhancement (PM&E) measures identified by the Commission, the agencies, Indian tribes, NGOs, and the public.

(1913). The Raker Act requires the Hetch Hetchy System to release a specified amount of water to the Districts. Section 29 of the Federal Power Act, 16 U.S.C. § 823 (2006), prohibits the Commission from modifying or repealing any provisions of the Raker Act.

3.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

At present, we propose to eliminate the following alternatives from detailed study in the EIS.

3.4.1 Non-power License

A non-power license is a temporary license the Commission would terminate whenever it determines that another governmental agency is authorized and willing to assume regulatory authority and supervision over the lands and facilities covered by the non-power license. At this time, no governmental agency has suggested a willingness or ability to take over the project. No party has sought a non-power license, and we have no basis for concluding that the Don Pedro Project should no longer be used to produce power. Thus, we do not consider a non-power license a reasonable alternative to relicensing the project.

3.4.2 Project Decommissioning

Decommissioning of the project could be accomplished with or without dam removal. Either alternative would require denying the relicense application and surrender or termination of the existing license with appropriate conditions. There would be significant costs involved with decommissioning the project and/or removing any project facilities. The project provides a viable, safe, and clean renewable source of power to the region. With decommissioning, the project would no longer be authorized to generate power.

No party has suggested project decommissioning would be appropriate in this case, and we have no basis for recommending it. Thus, we do not consider project decommissioning a reasonable alternative to relicensing the project with appropriate environmental measures.

4.0 SCOPE OF CUMULATIVE EFFECTS AND SITE-SPECIFIC RESOURCE ISSUES

4.1 CUMULATIVE EFFECTS

According to the Council on Environmental Quality's regulations for implementing NEPA (50 C.F.R. 1508.7), a cumulative effect is the effect on the environment that

results from the incremental effect of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time, including hydropower operations, diversions for irrigation and drinking water supply, past mining activities, and other land and water development activities, including agriculture and timber harvesting.

There are approximately eight major dams and reservoirs in the Tuolumne River Basin, with a combined storage capacity of about 2,777,122 acre-feet. Five of these dams are located upstream of the project (Pre-Application Document, page 5-60, Vol. II). The Tuolumne River below the Don Pedro Project is affected by the operations of LaGrange dam, the Districts non-project diversion dam used to divert water into irrigation canals.

4.1.1 Resources that could be Cumulatively Affected

Based on information in the Pre-Application Document, and preliminary staff analysis, we anticipate water resources, aquatic resources, terrestrial resources, and recreational resources as resources with the potential to be cumulatively affected by the continued operation and maintenance of the Don Pedro Project. By this document, we are asking for recommendations on additional resources that may be affected cumulatively.

4.1.2 Geographic Scope

Our geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of: (1) the proposed action's effect on the resources, and (2) contributing effects from other hydropower and non-hydropower activities within the Tuolumne River Basin. Because the proposed action would affect the resources differently, the geographic scope for each resource may vary.

At this time, we are seeking input to aid us in defining an appropriate geographic scope for each of the resource areas/issues identified in section 4.2 below.

4.1.3 Temporal Scope

The temporal scope of our cumulative effects analysis in the EIS will include a discussion of past, present, and reasonably foreseeable future actions and their effects on each resource that could be cumulatively affected. Based on the potential term of a new license, the temporal scope will look 30 to 50 years into the future, concentrating on the

effect on the resources from reasonably foreseeable future actions. The historical discussion will, by necessity, be limited to the amount of available information for each resource. The quality and quantity of information, however, diminishes as we analyze resources further away in time from the present.

4.2 RESOURCE ISSUES

In this section, we present a preliminary list of environmental issues to be addressed in the EIS. We identified these issues, which are listed by resource area, by reviewing the PAD and the Commission's record for the Don Pedro Project. This list is not intended to be exhaustive or final, but contains those issues raised to date that could have substantial effects. After the scoping process is complete, we will review the list and determine the appropriate level of analysis needed to address each issue in the EIS.

4.2.1 Geologic and Soils Resources

- Effects of project operation and maintenance on soil erosion and shoreline erosion at the project reservoir and stream reaches
- Potential effects of any project-related changes in streamflow and sediment delivery to project stream reaches on stream geomorphic processes or reservoir bathymetry
- Potential effects of runoff from project roads and other hard surface runoff on erosion and sediment transport
- Potential effects of the use of project spillways and dam outlet facilities on soil erosion
- Potential effects of project operations on large woody debris distribution and recruitment
- Effects of project-related recreation on soil compaction or erosion

4.2.2 Aquatic Resources

- Effects of project operation on the quantity and timing of streamflow in the project-affected downstream reach, including water storage, peaking operations, and ramping rates

- Potential effects of project operation and maintenance on water quality, water temperature, and water quantity in the project reservoir and the project-affected downstream reach
- Effects of project operation and maintenance on fish populations in project reservoirs and the project-affected stream reach including fall Chinook salmon
- Effects of retention of sediment in the project reservoir on downstream fish spawning habitat and benthic macroinvertebrate populations
- Potential effects of project-related changes in the recruitment and movement of large woody debris on aquatic resources and their habitat
- Potential effects of project operations on stranding or displacement of fish
- Potential effects of entrainment at the project dam and intake on fish populations

4.2.3 Terrestrial Resources

- Effects of project operation, including water level fluctuations, ground-disturbing activities, and maintenance on special-status wildlife species and habitat.
- Potential effects of project operation, including water level fluctuations, ground-disturbing activities, and maintenance on special-status plant species and botanical resources.
- Potential effects of project operation, including water level fluctuations, ground-disturbing activities, and maintenance on the presence and spread of noxious weeds.
- Effects of project operation, including water level fluctuations, ground-disturbing activities, and maintenance activities on wetland, riparian, and littoral vegetation communities.
- Effects of maintenance and use of project recreation facilities by recreationists on special-status wildlife species and shoreline vegetation.

- Effects of vegetation clearing for project maintenance on wildlife and botanical resources.

4.2.4 Threatened and Endangered Species

- Effects of project operation, including water level fluctuations, ground-disturbing activities, and maintenance on plants and wildlife species listed as threatened or endangered under the Endangered Species Act (ESA).⁶
- Effects of maintenance and use of project recreation facilities by recreationists on species listed as threatened or endangered under the ESA.
- Effects of project operation and maintenance on designated critical habitat under the ESA.⁷
- Effects of vegetation clearing for project maintenance on species listed as threatened or endangered under the ESA.

4.2.5 Recreation and Land Use

- Effects of water levels in project reservoirs on recreation.
- Effects of project operations on public access to project waters, existing recreational opportunities, and future recreational opportunities within the project boundary.

⁶ Species cited by Districts as threatened or endangered under the ESA occurring in the project area and surrounding lands include the Hartweg's golden sunburst, Hairy Orcutt grass, Greene's tuctoria, San Joaquin kit fox, succulent owl's-clover, Hoover's spurge, Colusa grass, Chinese Camp brodiaea, Layne's ragwort, Red Hills vervain, Valley elderberry longhorn beetle, vernal pool fairy shrimp, California tiger salamander (Central Valley DPS), California red-legged frog, and the steelhead (California Central Valley DPS).

⁷ Species cited by Districts with designated critical habitat occurring in the project area and surrounding lands include the Hairy Orcutt grass, Greene's tuctoria, Succulent owl's-clover, Hoover's spurge, Colusa grass, vernal pool fairy shrimp, California tiger salamander (Central Valley DPS), and steelhead (California Valley DPS).

- Effects of project operations on quality and availability of flow-dependent recreation opportunities, including whitewater boating, angling, and wading.
- Adequacy of existing recreation facilities (including accessible facilities) to meet current and future recreational demand.
- Effects of the project operations and maintenance on the condition and use of roads within the project area.

4.2.6 Cultural Resources

- Effects of the project on historic, archeological, and traditional cultural resources that may be eligible for inclusion in the National Register of Historic Places

4.2.7 Aesthetic Resources

- Effects of project operations, maintenance activities, and project recreation use on aesthetic resources, including the reservoirs and downstream reach, within the project area

4.2.8 Developmental Resources

- Power benefits of the project and alternatives, and the effects of any recommended environmental measures on the power benefits.
- Effect of any recommended changes in project operation on other developmental benefits—such as irrigation, water supply, and flood control.

5.0 PROPOSED STUDIES

Depending upon the findings of studies completed by Districts and the recommendations of the consulted entities, Districts will consider, and may propose certain other measures to enhance environmental resources affected by the project as part of the proposed action. Districts initial study proposals are identified by resource area in table 1. Detailed information on Districts initial study proposals can be found in the PAD, Vol. I, Attachment 6. The Districts continue to conduct studies on water quality and aquatic resources as required by the existing license.⁸ Further studies may need to be

⁸ 128 FERC ¶ 61,035 (2009), 131 FERC ¶ 62,110 (2010), and 131 FERC ¶ 62,097

added to this list based on comments provided to the Commission and Districts from interested participants, including Indian tribes.

Table 1. Districts Initial Study Proposals (Source: PAD).

Water Resources

6-1 - Water Quality Assessment Study Plan

Aquatic Resources

6-2 - Special-Status Amphibians and Aquatic Turtles Study Plan

6-5 - ESA-Listed Amphibians - California Tiger Salamander Study Plan

6-6 - ESA-Listed Amphibians - California Red-Legged Frog Study Plan

Terrestrial Resources

6-3 - Special-Status Wildlife - Bats Study Plan

6-4 - Special-Status Plants Study Plan

6-7 - ESA-Listed Wildlife - Valley Elderberry Longhorn Beetle Study Plan

6-8 - ESA- and CESA-Listed Plants Study Plan

Cultural Resources

6-9 - Historic Properties Study Plan

6-10- Native American - Traditional Cultural Properties and Ethnographic Study Plan

6.0 REQUEST FOR INFORMATION AND STUDIES

We are asking federal, state, and local resource agencies; Indian tribes; NGOs; and the public to forward to the Commission any information that will assist us in conducting an accurate and thorough analysis of the project-specific and cumulative effects associated with relicensing the Don Pedro Project. The types of information requested include, but are not limited to:

- information, quantitative data, or professional opinions that may help define the geographic and temporal scope of the analysis (both site-specific and cumulative effects), and that helps identify significant environmental issues;

- identification of, and information from, any other Environmental Assessment, EIS, or similar environmental study (previous, on-going, or planned) relevant to the proposed relicensing of the Don Pedro Project;
- existing information and any data that would help to describe the past and present actions and effects of the project and other developmental activities on environmental and socioeconomic resources;
- information that would help characterize the existing environmental conditions and habitats;
- the identification of any federal, state, or local resource plans, and any future project proposals in the affected resource area (e.g., proposals to construct or operate water treatment facilities, recreation areas, water diversions, timber harvest activities, or fish management programs), along with any implementation schedules);
- documentation that the proposed project would or would not contribute to cumulative adverse or beneficial effects on any resources. Documentation can include, but need not be limited to, how the project would interact with other projects in the area and other developmental activities; study results; resource management policies; and reports from federal and state agencies, local agencies, Indian tribes, NGOs, and the public;
- documentation showing why any resources should be excluded from further study or consideration; and
- study requests by federal and state agencies, local agencies, Indian tribes, NGOs, and the public that would help provide a framework for collecting pertinent information on the resource areas under consideration necessary for the Commission to prepare the EIS for the project.

All requests for studies filed with the Commission must meet the criteria found in Appendix A, *Study Plan Criteria*.

The requested information, comments, and study requests should be submitted to the Commission no later than June 10, 2011. All filings must clearly identify the following on the first page: **Don Pedro Hydroelectric Project (P-2299-075)**. Scoping comments may be filed electronically via the Internet. See 18 C.F.R. 385.2001(a)(1)(iii)

and the instructions on the Commission's website <http://www.ferc.gov/docs-filing/efiling.asp>. Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at <http://www.ferc.gov/docs-filing/ecomment.asp>. You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659. Although the Commission strongly encourages electronic filing, documents may also be paper-filed. To paper-file, mail an original and seven copies to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, NE, Washington, D.C. 20426.

Register online at <http://www.ferc.gov/esubscription.asp> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, please contact FERC Online Support.

Any questions concerning the scoping meetings, site visits, or how to file written comments with the Commission should be directed to Jim Hastreiter at (503) 552-2760 or james.hastreiter@ferc.gov. Additional information about the Commission's licensing process and the Don Pedro Project may be obtained from the Commission's website, www.ferc.gov or Districts relicensing website, <http://www.donpedro-relicensing.com>.

7.0 EIS PREPARATION SCHEDULE

At this time, we anticipate the need to prepare a draft and final EIS. The draft EIS will be sent to all persons and entities on the Commission's service and mailing lists for the Don Pedro Project. The EIS will include our recommendations for operating procedures, as well as PM&E measures that should be part of any license issued by the Commission. All recipients will then have 60 days to review the EIS and file written comments with the Commission. All comments on the draft EIS filed with the Commission will be considered in preparation of the final EIS.

The major milestones, including those for preparing the EIS, are as follows:

<u>Major Milestone</u>	<u>Target Date</u>
Scoping Meetings	May 11, 2011
Comments on PAD and SD1 and Study Requests	June 10, 2011
License Application Filed	April 2014
Ready for Environmental Analysis Notice Issued	June 2014

Deadline for Filing Comments, Recommendations, and Agency Terms and Conditions/Prescriptions	August 2014
Draft EIS Issued	February 2015
Comments on Draft EIS Due	April 2015
Deadline for Filing Modified Agency Recommendations	June 2015
Final EIS Issued	September 2015

If Commission staff determines that there is a need for additional information or additional studies, the issuance of the Ready for Environmental Analysis notice could be delayed. If this occurs, all subsequent milestones would be delayed by the time allowed for Districts to respond to the Commission's request. A copy of the process plan, which has a complete list of relicensing milestones for the Don Pedro Project, including those for developing the license application, is attached as appendix B to this SD1.

8.0 PROPOSED EIS OUTLINE

The preliminary outline for the Don Pedro Project EIS is as follows:

PREFACE
COVER SHEET
FORWARD
TABLE OF CONTENTS
LIST OF FIGURES
LIST OF TABLES
ACRONYMS AND ABBREVIATIONS
EXECUTIVE SUMMARY

1.0 INTRODUCTION

- 1.1 Application
- 1.2 Purpose of Action and Need for Power
 - 1.2.1 Purpose of Action
 - 1.2.2 Need for Power
- 1.3 Statutory and Regulatory Requirements
 - 1.3.1 Federal Power Act
 - 1.3.1.1 Section 18 Fishway Prescriptions
 - 1.3.1.2 Section 4(e) Conditions
 - 1.3.1.3 Section 10(j) Recommendations
 - 1.3.2 Clean Water Act
 - 1.3.3 Endangered Species Act

- 1.3.4 Coastal Zone Management Act
- 1.3.5 National Historic Preservation Act
- 1.3.6 Wild and Scenic Rivers Act
- 1.3.7 Magnuson-Stevens Fishery Conservation and Management Act
- 1.3.8 Other Regulatory Requirement
- 1.4 Public Review and Comment
 - 1.4.1 Scoping
 - 1.4.2 Interventions
 - 1.4.3 Comments on the Application
 - 1.4.4 Comments on Draft EIS
- 2.0 PROPOSED ACTION AND ALTERNATIVES
 - 2.1 No-action Alternative
 - 2.1.1 Existing Project Facilities
 - 2.1.2 Project Safety
 - 2.1.3 Existing Project Operation
 - 2.1.4 Existing Environmental Measures
 - 2.2 Applicant's Proposal
 - 2.2.1 Proposed Project Facilities
 - 2.2.2 Proposed Project Operation
 - 2.2.3 Proposed Environmental Measures
 - 2.2.4 Modifications to Applicant's Proposal—Mandatory Conditions
 - 2.3 Staff Alternative
 - 2.4 Staff Alternative with Mandatory Conditions
 - 2.5 Other Alternatives (as appropriate)
 - 2.6 Alternatives Considered but Eliminated from Detailed Analysis
 - 2.6.1 Issuing a Nonpower License
 - 2.6.2 Retiring the Project
- 3.0 ENVIRONMENTAL ANALYSIS
 - 3.1 General Description of the River Basin
 - 3.2 Scope of Cumulative Effects Analysis
 - 3.2.1 Geographic Scope
 - 3.2.2 Temporal Scope
 - 3.3 Proposed Action and Action Alternatives
 - 3.3.1 Geologic and Soil Resources
 - 3.3.2 Aquatic Resources
 - 3.3.3 Terrestrial Resources
 - 3.3.4 Threatened and Endangered Species
 - 3.3.5 Recreation and Land Use
 - 3.3.6 Cultural Resources

- 3.3.7 Aesthetic Resources
- 3.3.8 Socioeconomics
- 3.4 No-action Alternative
- 4.0 DEVELOPMENTAL ANALYSIS
 - 4.1 Power and Economic Benefits of the Project
 - 4.2 Comparison of Alternatives
 - 4.3 Cost of Environmental Measures
- 5.0 CONCLUSIONS AND RECOMMENDATIONS
 - 5.1 Comparison of Alternatives
 - 5.2 Comprehensive Development and Recommended Alternative
 - 5.3 Unavoidable Adverse Effects
 - 5.4 Recommendations of Fish and Wildlife Agencies
 - 5.5 Consistency with Comprehensive Plans
- 6.0 LITERATURE CITED
- 7.0 LIST OF PREPARERS
- 8.0 LIST OF RECIPIENTS

APPENDICES

A—License Conditions Recommended by Staff

B—Response to Comments on the Draft Environmental Assessment (FEIS only)

9.0 COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA, 16 U.S.C. section 803(a)(2)(A), requires the Commission to consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. The staff has preliminarily identified and reviewed the plans listed below that may be relevant to the Don Pedro Project. Agencies are requested to review this list and inform the Commission staff of any changes. If there are other comprehensive plans that should be considered for this list that are not on file with the Commission, or if there are more recent versions of the plans already listed, they can be filed for consideration with the Commission according to 18 CFR 2.19 of the Commission's regulations. Please follow the instructions for filing a plan at <http://www.ferc.gov/industries/hydropower/gen-info/licensing/complan.pdf>.

The following is a list of comprehensive plans currently on file (as of January 2011) with the Commission that may be relevant to the Don Pedro Project.

- California Advisory Committee on Salmon and Steelhead Trout. 1988. Restoring the balance: 1988 annual report. Sausalito, California. 84 pp.
- California Department of Fish and Game. 1990. Central Valley salmon and steelhead restoration and enhancement plan. Sacramento, California. April 1990. 115 pp.
- California Department of Fish and Game. 1993. Restoring Central Valley streams: A plan for action. Sacramento, California. November 1993.
- California Department of Fish and Game. 1996. Steelhead restoration and management plan for California. February 1996. 234 pp.
- California Department of Parks and Recreation. 1998. Public opinions and attitudes on outdoor recreation in California. Sacramento, California. March 1998.
- California Department of Parks and Recreation. California Outdoor Recreation Plan (SCORP). Sacramento, California. April 1994.
- California Department of Water Resources. 1983. The California water plan: projected use and available water supplies to 2010. Bulletin 160-83. Sacramento, California. December 1983. 268 pp.
- California Department of Water Resources. 1994. California water plan update. Bulletin 160-93. Sacramento, California. October 1994. Two volumes and executive summary.
- California Department of Water Resources. 2000. Final programmatic environmental impact statement/environmental impact report for the CALFED Bay-Delta Program. Sacramento, California. July 2000. CD Rom, including associated plans.
- California State Water Resources Control Board. 1995. Water quality control plan report. Sacramento, California. Nine volumes.
- California - The Resources Agency. Department of Parks and Recreation. 1983. Recreation needs in California. Sacramento, California. March 1983.
- National Park Service. 1982. The nationwide rivers inventory. Department of the

Interior, Washington, D.C. January 1982.

State Water Resources Control Board. 1999. Water quality control plans and policies adopted as part of the State comprehensive plan. April 1999.

U.S. Fish and Wildlife Service. 1990. Central Valley habitat joint venture implementation plan: a component of the North American waterfowl management plan. February 1990.

U.S. Fish and Wildlife Service. 2001. Final restoration plan for the anadromous fish restoration program. Department of the Interior, Sacramento, California. January 9, 2001.

U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

U.S. Fish and Wildlife Service. Undated. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.

10.0 MAILING LIST

The list below is the Commission's official mailing list for the Don Pedro Project (FERC No. 2299) (as of December 26, 2010). If you want to receive future mailings for the Don Pedro Project and are not included in the list below, please send your request by email to efiling@ferc.gov or by mail to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1A, Washington, DC 20426. All written and emailed requests to be added to the mailing list must clearly identify the following on the first page: Don Pedro Hydroelectric Project No. 2299-075. You may use the same method if requesting removal from the mailing list below.

Register online at <http://www.ferc.gov/esubscribenow.htm> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659.

Mailing List

Party	Primary	Other Contact
California Sportfishing Protection Alliance		Director P.O. Box 1790 Graeagle, California 96103
California Sportfishing Protection Alliance		William M. Jennings Chairman California Sportfishing Protection Alliance 3536 Rainier Ave Stockton, California 95204
California Department of Fish and Game	California Office of Attorney General	John Turner California Department of Fish and Game 1416 9th St Sacramento, California 95814-5511
California Department of Fish and Game		C. F. Raysbrook California Department of Fish and Game PO Box 944209 Sacramento, California 94244-2090
California Department of Fish and Game	Nancee Murphy California Department of Fish and Game 1416 9th St Fl 12 Sacramento, California 95814-5510	Dale Mitchell California Department of Fish and Game 1234 E Shaw Ave Fresno, California 93710-7802
California		Daniel E. Lungren

Department of Fish and Game		California Department of Fish and Game PO Box 944255 Sacramento, California 94244
California Department of Fish and Game	Cindy Chadwick California Department of Fish and Game 1416 9th St Sacramento, California 95814-5511	George Nokes California Department of Fish and Game 1234 E Shaw Ave Fresno, California 93710-7802
California Department of Fish and Game	Tom Gibson Acting General Counsel California Department of Fish and Game 1416 Ninth St., 12th Floor Sacramento, California 95814	
California Fish & Game Commission		FERC Contact California Fish & Game Commission ATTN: Environmental Services Division 1416 9th St Sacramento, California 95814-5511
California Public Utilities Commission		California Public Utilities Commission 505 Van Ness Ave San Francisco, California 94102-3214
California Rivers	Julie Gantenbein Staff Attorney	

Restoration Fund	Natural Heritage Institute 18255 Robin Ave. Sonoma, California 95475	
Committee To Save The Kings River		Paul D. Martzen Conservation & Access Chair Committee To Save The Kings River 942 N. Harrison Ave. Fresno, California 93728-3028
Friends of Tuolomne	Allison Boucher Director Friends Of Tuolomne PMB 314 1900 NE 3rd, Ste. 106 Bend, Oregon 97701	
House of Representatives		Thomas M. McClintock Honorable House of Representatives 508 Cannon HOB Washington, District of Columbia 20515
House Of Representatives		Nancy Pelosi Honorable House of House of Representatives Washington, District of Columbia 20515
Merced County Water Users Association		Water Users Association P.O. Box 31 El Nido, California 95317
Modesto Irrigation District		Scott Steffen Assistant General Counsel Modesto Irrigation District 1231 Eleventh Street Modesto, California 95354

Modesto Irrigation District		Joel Moskowitz Modesto Irrigation District P.O. Box 4060 Modesto, California 95352-4060
Modesto Irrigation District	Roger Masuda Griffith and Masuda Attorney at Law 517 E. Olive Ave Turlock, California 95380-4012	Allen Short CEO Modesto Irrigation District P.O. Box 4060 Modesto, California 95352-4060
NOAA Fisheries Service	Dan Hytrek Attorney NOAA General Counsel, Southwest 501 W. Ocean Blvd., Suite 4470 Long Beach, California 90802	
NOAA National Marine Fisheries Service	Kathryn Kempton Attorney-Advisor NOAA Office of General Counsel - Southwest 501 W. Ocean Blvd., Ste. #4470 Long Beach, California 90802	
Office of the Governor of California		Governor of California RE: FERC Projects Office of the Governor of California State Capitol Building Sacramento, California 95814

Michael J. Sale		Michael J. Sale P.O. Box 2008 Oak Ridge, Tennessee 37831-2008
San Francisco Bay Area Water Users Association	Allison Schutte San Francisco Bay Area Water Users Association 425 Market Street 26th Floor San Francisco, California 94105	Ray McDevitt San Francisco Bay Area Water Users Association 425 Market Street 26th Floor San Francisco, California 94105
San Francisco Office of City Attorney	Donn Furman Deputy City Attorney 1390 Market Street, Suite 418 San Francisco, California 94102	
San Francisco, City & County of		Anson B. Moran San Francisco, City & County of 1155 Market St Fl 4 San Francisco, California 94103-1522
San Francisco, City & County of	Ellis & Prioleau	Tom Berliner San Francisco, City & County of One Market Plaza, Spear Tower, Suite 2000 San Francisco, California 94105
San Francisco, City & County of	Sharon Coleman Spiegel & McDiarmid LLP 1333 New Hampshire Avenue, NW Washington, District of Columbia 20036	William Huang 1333 New Hampshire Ave, NW Washington, District of Columbia 20036
Siskiyou, County of (CA)		County Clerk Siskiyou, County of (CA)

		510 N. Main St Yreka, California 96097-2525
Stanislaus Flyfishermen	David Boucher Treasurer Stanislaus Flyfishermen 7523 Meadow Ave Stockton, California 95207	
TID/MID	Tim Ford Turlock Irrigation District 333 E. Canal Dr. Turlock, California 95380	
Tuolumne River Expeditions, Inc.		Steve Welch President Tuolumne River Expeditions, Inc. 24000 Casa Loma Road Groveland, California 95321
Tuolumne River Preservation Trust		Johanna Thomas Tuolumne River Preservation Trust 111 New Montgomery St, Ste 205 San Francisco, California 94105-3614
Tuolumne River Preservation Trust	Richard Roos-Collins Director, Legal Services Natural Heritage Institute 100 Pine St. Suite 1550 San Francisco, California 94111	Tim Ramirez Tuolumne River Preservation Trust 1145 Market St. 4th Floor San Francisco, California 94103
Turlock & Modesto Irrigation District	John Whittaker Winston & Strawn LLP 1700 K St. N.W. Washington, District of Columbia 20006-3817	

Turlock & Modesto Irrigation District	William Madden Winston & Strawn LLP 1700 K Street, N.W. 2nd Floor Washington, District of Columbia 20006-3817	
Turlock Irrigation District		Larry Weis General Manager Turlock Irrigation District PO Box 949 Turlock, California 95381-0949
Turlock and Modesto Irrigation Districts	Greg Dias Modesto and Turlock Irrigation Districts 1231 Eleventh Street Modesto, California 95354	
Turlock Irrigation District and Modesto Irrigation District	Robert Nees Director of Water Resources an TID/MID 333 East Canal Drive P.O. Box 949 Turlock, California 95380	
U.S. Fish & Wildlife Service		Field Supervisor 2800 Cottage Way Room W-2605 Sacramento, California 95825
US Army Corps of Engineers		Commander US Army Corps of Engineers San Francisco District Office 1455 Market St, #1760 San Francisco, California 94103

US Department of Interior	Regional Env Officer US Department of Interior DOI/Office of Env Policy & Compliance 1111 Jackson St Ofc 520 Oakland, California 94607-4807	
US Department of Interior	Kerry O'Hara US Department of Interior Regional Solicitor Office 2800 Cottage Way Ste E1712 Sacramento, California 95825-1863	
US Department of Interior	Field Supervisor Sacramento Office U.S. Department of Interior 2800 Cottage Way Ste W2605 Sacramento, California 95825	
Water Committee of the Tuolumne County		Ken Kessel Water Committee of the Tuolumne County 19296 Cordelia Ave Sonora, Water Committee of the Tuolumne County 95370-9718
Water Resources Control Board		Jim Canaday Senior Environmental Scientist Water Resources Control Board 1001 I St

APPENDIX A
STUDY PLAN CRITERIA
18 CFR Section 5.9(b)

Any information or study request must contain the following:

1. Describe the goals and objectives of each study proposal and the information to be obtained;
2. If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;
3. If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study;
4. Describe existing information concerning the subject of the study proposal, and the need for additional information;
5. Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;
6. Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate filed season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge; and
7. Describe considerations of level of effort and cost, as applicable, and why proposed alternative studies would not be sufficient to meet the stated information needs.

**APPENDIX B
PROCESS PLAN AND SCHEDULE**

Don Pedro Project Process Plan and Schedule			
(shaded milestones are unnecessary if there are no study disputes; if due date falls on a weekend or holiday, the due date is the following business day)			
Responsible Entity	Pre-Filing Milestone	Date	FERC Regulation
Applicant	File NOI/PAD with FERC	2/10/11	5.5, 5.6
FERC	Notice of Commencement of Proceeding & SD1 issued	4/11/11	5.8
FERC	Scoping and Site Visit	5/11/11	5.8(b)(viii)
FERC	Tribal Meeting	5/11	5.7
All stakeholders	NOI/PAD/SD1 comments due	6/10/11	5.9
FERC	Issue SD2 if needed	7/25/11	5.1
Applicant	File Proposed Study Plan	7/25/11	5.11(a)
All stakeholders	Study Plan Meeting	8/24/11	5.11(e)
All stakeholders	Study Plan Comments due	10/23/11	5.12
Applicant	File Revised Proposed Study Plan	11/22/11	5.13(a)
All stakeholders	Revised Proposed Study Plan Comments due	12/7/11	5.13(b)
FERC	Director's Study Plan Determination	12/22/11	5.13(c)
Mandatory Cond. Agency	Any Study Disputes due	1/11/12	5.14(a)
Study Determination Panel	Third Panel Member selected	1/26/12	5.14(d)(3)
Study Det. Panel	Panel Convenes	1/31/12	5.14(d)
Applicant	Applicant Comments on Study Dispute due	2/5/12	5.14(j)
Study Det. Panel	Technical Conference held	2/10/12	5.14(j)
Study Det. Panel	Panel Finding Issued	3/1/12	5.14(k)
FERC	Director's Study Dispute Determination	3/21/12	5.14(l)
Applicant	First Study Season	Spring/ Summer 2012	5.15(a)
Applicant	Initial Study Report	12/21/12	5.15(c)(1)
All stakeholders	Initial Study Report Meeting	1/5/13	5.15(c)(2)
Applicant	Initial Study Report Meeting Summary	1/20/13	5.15(c)(3)
All stakeholders	Study Disputes/Request to Modify Study Plan due	2/19/13	5.15(c)(4)
All stakeholders	Responses to Disputes/Study Requests	3/21/13	5.15(c)(5)
FERC	Directors Study Plan Determination	4/20/13	5.15(c)(6)
Applicant	Second Study Season	Spring/ Summer 2013	5.15(a)
Applicant	Updated Study Report due	12/21/13	5.15(f)
All stakeholders	Updated Study Report Meeting	1/5/14	5.15(f)
Applicant	Updated Study Report Meeting Summary	1/20/14	5.15(f)
All stakeholders	Study Disputes/Request to Modify Study Plan due	2/19/14	5.15(f)
All stakeholders	Responses to Disputes/Study Requests	3/21/14	5.15(f)

FERC	Directors Study Plan Determination	4/20/14	5.15(f)
Applicant	Preliminary Licensing Proposal due	12/1/13	5.16(a)
All stakeholders	Comments on Preliminary Licensing Proposal	3/1/14	5.16(e)
Applicant	License Application filed	4/30/14	5.17
Applicant	Public Notice of License Application filing	5/14/14	5.17(d)(2)
Responsible Entity	Post-Filing Milestone	Date	FERC Regulation
FERC	Tendering Notice of new application	5/14/14	5.19
FERC	Director's Additional Studies Determination/Deficiencies	5/30/14	5.19(e); 5.20(a)(2)
FERC	Ready for Environmental Analysis and Application Acceptance	6/29/14	5.22
All stakeholders	Comments, Interventions, Recommendations, prescriptions due	8/28/14	5.23(a)
Applicant	Requests Section 401 Certification	8/28/14	5.23(b)
Applicant	Reply Comments due	10/12/14	5.23(a)
FERC	Issue Draft EIS	2/24/15	5.24
All stakeholders	Comments on EIS due	4/25/15	5.24(c)
Agencies	Modified 4(e) Conditions and Fishway Prescriptions	6/24/15	5.24(d)
FWS/NMFS	ESA biological opinion(s) as needed	7/9/15	ESA
FERC	Issue Final EIS	9/22/15	