

April 28, 2014  
E-Filing

Don Pedro Hydroelectric Project  
FERC Project #2299 - California

Kimberly D Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington DC 20426

RE: Don Pedro Hydroelectric Project, FERC No. 2299  
Final License Application

Dear Secretary Bose:

In accordance with Section 15(c)(1) of the Federal Power Act, 16 U.S.C. § 808(c)(1), and Section 5.17(a) of the regulations of the Federal Energy Regulatory Commission ("Commission" or "FERC"), 18 C.F.R. § 5.17(a), Turlock Irrigation District ("TID") and Modesto Irrigation District ("MID") (collectively, the "Districts") hereby submit this Final License Application ("FLA") for the relicensing of the Don Pedro Hydroelectric Project ("Project"), FERC No. 2299. The current license for the Project, for which the Districts are co-licensees, expires on April 30, 2016.

The Project is located on the Tuolumne River in the Central Valley Region of California. The primary purposes of the Don Pedro Project are water supply and flood control. Irrigation, municipal, and industrial water users in the two counties served by the Districts are dependent upon the reliable water supply provided by the Don Pedro Project, and the economic benefits resulting from these uses extend throughout the Central Valley Region. The Project also provides low-cost, emissions-free, renewable energy; offers a wide variety of recreational opportunities; and provides flows to support the resources of the lower Tuolumne River, including anadromous fish. The benefits of the Don Pedro Project also extend to the San Francisco Bay Area by virtue of the "water banking" privilege acquired at the Don Pedro Project by the City and County of San Francisco ("CCSF"), which helps CCSF manage the water supply needs of its 2.6 million customers in the Bay Area.

This FLA is the culmination of a multi-year, comprehensive effort by the Districts in consultation with numerous federal and state resource agencies, Indian tribes, and members of the public, working under the Commission's Integrated Licensing Process ("ILP"), to identify and assess the effects of ongoing Project operations on environmental resources. As part of this effort, the Districts worked closely with relicensing participants to compile and review existing information and conduct over 35 additional studies, including holding 20 separate workshops, covering the full range of environmental resources in the Don Pedro Project area. As the Commission and relicensing participants know,

April 28, 2014

several important studies are yet to be completed. The FLA includes a schedule for completing these studies and filing any amendments to the FLA that may be needed as a result of these investigations.

The FLA reflects and builds upon all of these efforts to describe the Project and the environmental resources of the area. Some of this information contains detailed Project facility diagrams and other information related to the "production, generation, transportation, transmission, or distribution of energy" (See 18 C.F.R. § 388.113(c)). Pursuant to 18 C.F.R. § 388.112(b), the Districts request that the Commission treat this information as Critical Energy Infrastructure Information ("CEII"). In accordance with the Commission's filing guidelines, all proposed CEII has been removed from the public version of the FLA and is being e-filed as CEII.

Additionally, the Districts note that the draft Historic Properties Management Plan ("HPMP") contains sensitive information regarding the specific location of cultural resources and historic properties which is not to be disclosed to the public. See 18 C.F.R. § 5.6(d)(3)(x)(C); 36 C.F.R. § 800.11(c). Accordingly, pursuant to 18 C.F.R. § 388.112(b), the Districts hereby request that the HPMP be accorded privileged treatment and placed within the Commission's non-public file. See 5 U.S.C. § 552; 18 C.F.R. § 388.107.

The Districts will make the information from this FLA, with the exception of the CEII and privileged materials, available by posting it on the Project relicensing website ([www.donpedro-relicensing.com](http://www.donpedro-relicensing.com)) in the DOCUMENTS folder and by distributing CD copies of the FLA to those participants who have provided updated mailing addresses. In addition, the Districts will publish notice of the filing in the county in which the Project is located, and promptly provide the Commission with proof of publication of the notice.

Pursuant to Section 5.19(a) of the Commission's regulations, the Districts request that the Commission issue a public notice of the tendering of the Application for filing.

The Districts look forward to continuing to work with Commission staff and all interested parties towards a new license for the Don Pedro Hydroelectric Project.

Respectfully submitted,



Casey Hashimoto, P.E.  
General Manager  
Turlock Irrigation District  
P.O. Box 949  
Turlock, CA 95381



Roger VanHoy, P.E.  
General Manager  
Modesto Irrigation District  
P.O. Box 4060  
Modesto, CA 95352

cc: Relicensing Participants' Email Group



**DON PEDRO HYDROELECTRIC PROJECT  
FERC NO. 2299**

**FINAL LICENSE APPLICATION**

**INITIAL STATEMENT  
EXECUTIVE SUMMARY  
EXHIBITS A THROUGH H  
ATTACHMENT A: DISTRICTS' RESPONSE TO COMMENTS ON  
DRAFT LICENSE APPLICATION  
ATTACHMENT B: CONSULTATION RECORD  
ATTACHMENT C: FINAL STUDY REPORTS**



Prepared by:  
Turlock Irrigation District  
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Turlock, CA 95381

and

Modesto Irrigation District  
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Modesto, CA 95352

April 2014

**DON PEDRO HYDROELECTRIC PROJECT  
FERC NO. 2299**

**FINAL LICENSE APPLICATION**

**MASTER TABLE OF CONTENTS**

## **Initial Statement**

## **Executive Summary**

### **Exhibit A     Don Pedro Project Description**

### **Exhibit B     Don Pedro Project Operations and Resource Utilization**

- Appendix B-1     Current License Articles
- Appendix B-2     Development of Unimpaired Hydrology
- Appendix B-3     1997 to 2012 Historical and Base Case Annual and Monthly Flow Duration Curves
- Appendix B-4     Model Description and User's Guide
- Appendix B-5     Base Case Conditions 1971 to 2012

### **Exhibit C     Construction History and Proposed Construction Schedule**

### **Exhibit D     Statement of Costs and Financing**

### **Exhibit E     Environmental Report**

- 1.0   Introduction
- 2.0   Proposed Action and Alternatives
- 3.0   Environmental Analysis
  - 3.1   General Description of the Tuolumne River Basin and Don Pedro Project
  - 3.2   Scope of Cumulative Effects Analysis
  - 3.3   Geology and Soils
  - 3.4   Water Resources
  - 3.5   Fish and Aquatic Resources
  - 3.6   Botanical Resources
  - 3.7   Wildlife Resources
  - 3.8   Threatened and Endangered Species
  - 3.9   Recreation, Land Use, and Shoreline Management
  - 3.10   Aesthetic Resources
  - 3.11   Cultural Resources
  - 3.12   Socioeconomic Resources
- 4.0   Cumulative Effects of the Proposed Action
- 5.0   Developmental Analysis
- 6.0   Conclusions
- 7.0   Literature Cited
- 8.0   Consultation Record

Appendix E-1	Draft Vegetation Management Plan
	Attachment A BLM Manual Handbook-1745-1, Use of Native Plant Materials in California
	Attachment B Conservation Guidelines for the Valley Elderberry Longhorn Beetle
Appendix E-2	Draft Bald Eagle Management Plan
	Attachment A California Department of Fish and Wildlife (CDFW) California Bald Eagle Nesting Territory Survey Form
Appendix E-3	Draft Recreation Resource Management Plan
	Attachment A Construction Cost Estimate for the Ward's Ferry Bridge Whitewater Boating Take-Out Improvements
	Attachment B Don Pedro Recreation Agency Five Year Budget Plan
Appendix E-4	Draft Historical Properties Management Plan ( <b><i>Filed only with the Federal Energy Regulatory Commission as Privileged Information; Not Released to the Public</i></b> )
	Attachment A Resource Tables, Including Initial Treatment Plan
	Attachment B Isolate Location Map
	Attachment C Archaeological Sites Location Map
	Attachment D Built Environment Resources Location Map
	Attachment E Traditional Cultural Property Location Map
	Attachment F Assessment of Ongoing Don Pedro Project-Related Effects on Archaeological Sites Location Map
	Attachment G Inadvertent Discovery Notification Letters
	Attachment H Tribal and Agency Consultation History
	Attachment I State Historic Preservation Officer Consultation History
Appendix E-5	Draft Biological Assessment for the Terrestrial Species
	Attachment A Conservation Guidelines for the Valley Elderberry Longhorn Beetle 9 July 1999

**Exhibit F      General Design Drawings (*Contains Critical Energy Infrastructure Information [CEII]; Not Released to the Public*)**

- Appendix F-1      Exhibit F Drawings Filed only with the Federal Energy Regulatory Commission as Critical Energy Infrastructure Information (CEII)
- Appendix F-2      Supporting Design Report Filed only with the Federal Energy Regulatory Commission as Critical Energy Infrastructure Information (CEII)
- Attachment A      Supporting Technical Information
- Attachment B      Probable Maximum Flood Study

**Exhibit G      Project Maps**

**Exhibit H      Plans and Ability of Applicants to Operate the Don Pedro Hydroelectric Project**

- Appendix H-1      Fourth Agreement
- Appendix H-2      Single Line Diagram
- Appendix H-3      1972 Army Corps of Engineers Flood Control Manual
- Appendix H-4      Don Pedro Recreation Agency Regulations & Ordinances

**Attachment A – Districts’ Response to Comments on Draft License Application**

- Appendix A      Assessment of Don Pedro Project Operations to Meet EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards
- Appendix B      Request for Additional Information Regarding CDFW Comments on Draft License Application
- Appendix C      Response to Conservation Groups’ Comments Regarding Cumulative Effects Analysis
- Appendix D      Response to Tuolumne County Board of Supervisors’ Comments on the Districts’ Socioeconomic Study Report

**Attachment B – Consultation Record**

- Appendix A      Relicensing Participants Consultation Record Documents
- Appendix B      Agency Consultation Record Documents
- Appendix C      Relicensing Website Announcements Record Documents

**Attachment C – Final Study Reports**

- RR-01      Recreation Facility Condition and Public Accessibility Assessment, and Recreation use Assessment
- RR-02      Whitewater Boating Take Out Improvement Feasibility Study
- RR-03      Lower Tuolumne River Lowest Boatable Flow Study

RR-04	Visual Quality Study
TR-01	Special-Status Plants Study
TR-02	ESA- and CESA-Listed Plants Study
TR-03	Wetland Habitats Associated with Don Pedro Reservoir Study
TR-04	Noxious Weed Survey
TR-05	ESA-Listed Wildlife - Valley Elderberry Longhorn Beetle Study
TR-06	Special-Status Amphibians and Aquatic Reptiles Study
TR-07	ESA-Listed Amphibians - California Red-Legged Frog Study
TR-08	ESA-Listed Amphibians - California Tiger Salamander Study
TR-09	Special-Status Wildlife - Bats Study
TR-10	Bald Eagle Study
W&AR-01	Water Quality Assessment
W&AR-02	Project Operations/Water Balance Model
W&AR-03	Reservoir Temperature Model
W&AR-04	Spawning Gravel in the Lower Tuolumne River Study
W&AR-05	Salmonid Population Information Integration and Synthesis Study
W&AR-06	Tuolumne River Chinook Salmon Population Model
W&AR-07	2012 Predation Study
W&AR-08	Salmonid Redd Mapping Study
W&AR-10	<i>Oncorhynchus mykiss</i> Population Study
W&AR-12	<i>Oncorhynchus mykiss</i> Habitat Survey
W&AR-13	Fish Assemblage and Population Between Don Pedro Dam and La Grange Dam Study
W&AR-14	Temperature Criteria Assessment (Chinook Salmon and <i>Oncorhynchus mykiss</i> )
W&AR-15	Socioeconomics Study
W&AR-16	Lower Tuolumne River Temperature Model
W&AR-17	Don Pedro Fish Population Survey
W&AR-18	Sturgeon Study
W&AR-19	Lower Tuolumne River Riparian Information and Synthesis Study
W&AR-20	<i>Oncorhynchus mykiss</i> Scale Collection and Age Determination Study

Lower Tuolumne River Instream Flow Study

Lower Tuolumne River Instream Flow Study—Pacific Lamprey and Sacramento Splittail 1-D  
PHABSIM Habitat Assessment

Pulse Flow Study

In-River Diurnal Temperature Variation Study



**DON PEDRO HYDROELECTRIC PROJECT  
FERC NO. 2299**

**FINAL LICENSE APPLICATION**

**INITIAL STATEMENT**



Prepared by:  
Turlock Irrigation District  
P.O. Box 949  
Turlock, CA 95381

and

Modesto Irrigation District  
P.O. Box 4060  
Modesto, CA 95352

April 2014

**INITIAL STATEMENT**  
**BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION**

Application for License for Major Water Power Project – Existing Dam (18 C.F.R. §§ 4.50, 4.51, and 5.18).

(1) Turlock Irrigation District (TID) and Modesto Irrigation District (MID) (collectively, the Districts) apply to the Federal Energy Regulatory Commission (FERC) for a new license for the Don Pedro Hydroelectric Project (Project), FERC No. 2299, as described in the attached exhibits. The Project's current license expires on April 30, 2016.

(2) The location of the Project is:

State:	California
County:	Tuolumne
Nearby towns:	Modesto and Turlock
Stream:	Tuolumne River

(3) The exact names and business addresses of the applicants are:

Turlock Irrigation District	Modesto Irrigation District
333 E Canal Drive	1231 11 <sup>th</sup> Street
Turlock, CA 95380	Modesto, CA 95354
(209) 883-8300	(209) 526-7373

The exact names and business addresses of each person authorized to act as agent for the applicant in this application, if applicable, are:

<i>Turlock Irrigation District</i>	<i>Modesto Irrigation District</i>
Steve Boyd	Greg Dias
Director of Water Resources and	Project Manager
Regulatory Affairs	PO Box 4060
PO Box 949	Modesto, CA 95352
Turlock, CA 95381	(209) 526-7566
(209) 883-8364	<a href="mailto:gregd@mid.org">gregd@mid.org</a>
<a href="mailto:seboyd@tid.org">seboyd@tid.org</a>	

(4) The applicants are both public agencies and are claiming preference under Section 7(a) of the Federal Power Act. *See* 16 U.S.C. 796.

(5) (i) *The statutory or regulatory requirements of California, the state in which the project is located, that affect the project as proposed with respect to bed and banks and the appropriation, diversion, and use of water for power purposes, and with respect to the right to engage in the business of developing, transmitting, and distributing power and in any other business necessary to accomplish the purposes of the license under the Federal Power Act and (ii) The steps which the applicant has taken or plans to take to comply with each of the laws cited are:*

Regulation – 5(i)	Statutory or Regulatory Requirement	Status <sup>1</sup> – 5(ii)
California Fish and Game Code § 1601	Requires that parties notify the California Department of Fish and Wildlife (CDFW) prior to conducting any work in a streambed.	The Districts will submit a Section 1601 notification to the CDFW should work in a streambed be required.
California Water Code § 101	Allows for appropriation and use of water for power purposes.	The Districts have acquired the water rights necessary to operate the Project.
California Water Code § 101	Regulates the filing and issuance of water quality certificate to applicants otherwise required to obtain such a certificate under federal law.	The Districts will file an application for a water quality certificate with the State Water Resources Control Board (SWRCB) within 60 days from the date that FERC issues a notice that the Districts' application for new license is ready for environmental analysis [18 CFR § 4.34(b)(5)].
California Water Code § 6102	Requires owners of dams to cooperate with the California Division of Safety of Dams (CDSOD) in the inspection and maintenance of dams.	The Districts cooperate with CDSOD on annual inspections of Don Pedro Dam.
Division 11 of the California Water Code	Allows irrigation districts such as the Districts to engage in the business of developing, transmitting, and distributing electricity.	The Districts have demonstrated the ability to engage in the business of developing, transmitting, and distributing power under the appropriate California statute.

<sup>1</sup>The steps which the applicant has taken or plans to take to comply with each of the laws cited.

- (6) The names and business addresses of the owners of the existing project facilities are:

Turlock Irrigation District  
333 E Canal Drive  
Turlock, CA 95380

Modesto Irrigation District  
1231 11<sup>th</sup> Street  
Modesto, CA 95354

Brief Project description:

The Don Pedro Project is located on the Tuolumne River in western Tuolumne County, California, along the western slope of the Sierra Nevada. The FERC Project Boundary extends from river mile (RM) 53.2 to approximately RM 80.8 of the Tuolumne River. The Tuolumne River is a tributary to the San Joaquin River, which eventually flows into the Sacramento-San Joaquin River Delta, thence to San Francisco Bay. The Don Pedro Hydroelectric Project lies about 40 miles east of the City of Modesto and 26 miles northeast of the City of Turlock. A portion of the Don Pedro Hydroelectric Project occupies United States land, administered by the United States Department of Interior (USDOI) Bureau of Land Management (BLM) as part of the Sierra Resource Management Area. All other lands within the FERC Project Boundary are either owned jointly by TID and MID or are private lands under easement.

The Don Pedro powerhouse and its electrical switchyard are located immediately downstream of the dam at RM 54.6. The Don Pedro Reservoir has a normal maximum water surface elevation<sup>1</sup> of 830 feet (ft) above mean sea level. The FERC Project Boundary at the upper end of the reservoir extends to a water surface elevation of 845 ft at RM 80.8. The maximum water surface elevation resulting from the spillway design flood is estimated to be 852 ft. The drainage area of the Tuolumne River at Don Pedro Dam is approximately 1,533 square miles (mi<sup>2</sup>) (ACOE 1972).

<sup>1</sup> All elevations provided in the License Application are referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29).



The Don Pedro Project was formerly referred to as the New Don Pedro Project (and the Don Pedro Dam was referred to as the New Don Pedro Dam) because it displaced the original, smaller Don Pedro Dam and powerhouse, which was located approximately 1.5 miles upstream of the current dam. The old Don Pedro Dam remains in place.

(i) The existing authorized installed generating capacity is 168.015 megawatts (MW).

(ii) Check appropriate box:

☒ existing dam

☐ unconstructed dam

☐ existing dam, major modified project (see §4.30(b)(14))

(iii) Lands of the United States affected (shown on Exhibit G):

Land Ownership	Area (Acres)
National Forest	0
Indian Reservation	0
Public Lands Under Jurisdiction of the Bureau of Land Management	4,802
<b>Total U.S. Lands</b>	<b>4,802</b>

(iv) Check appropriate box:

☒ surveyed land

☐ unsurveyed land

#### **Additional Information Required by 18 C.F.R. § 5.18(a)**

(1) *Identify every person, citizen, association of citizens, domestic corporation, municipality, or state that has or intends to obtain and will maintain any proprietary right necessary to construct, operate, or maintain the project:*

The Districts presently hold and will continue to hold the proprietary rights necessary to operate and maintain the Project.

(2) *Identify (providing names and mailing addresses):*

(i) *Every county and/or parish in which any part of the project, and any Federal facilities that would be used by the project would be located:*

Tuolumne County, CA  
2 South Green Street  
Sonora, CA 95370-4618

(ii) *Every city, town, or similar local political subdivision:*

The Project is not located within any designated cities, towns, subdivisions, or Indian Tribe reservations. The nearest cities, towns, subdivisions, or population centers to the Project with a population of 5,000 or less are the unincorporated communities of La Grange, Chinese Camp, and Moccasin.

*(A) In which any part of the project, and any Federal facilities that would be used by the project, would be located:*

The Project does not use or include any federal or State of California facilities. The Project does occupy approximately 4,802 acres of federal land within the US Bureau of Land Management's Sierra Resource Management Unit.

*(B) That has a population of 5,000 or more people and is located within 15 miles of the project dam:*

No city, town, or subdivision with a population of 5,000 or more is located within 15 miles of the Don Pedro Dam.

*(iii) Every irrigation district, drainage district, or similar special purpose political subdivision:*

*(A) In which any part of the project, and any Federal facilities that would be used by the project, would be located:*

The Project is located on land owned by the Districts and on federal lands in an unincorporated area of Tuolumne County.

*(B) That owns, operates, maintains, or uses any project facilities that would be used by the project:*

The Project does not use any federal facilities.

*(iv) Every other political subdivision in the general area of the project that there is reason to believe would likely be interested in, or affected by, the application:*

None identified.

*(v) All Indian tribes that may be affected by the project:*

The Project does not occupy any known tribal lands; however, the following tribes may have interest in the relicensing:

<b>Buena Vista Rancheria</b> Roselynn Lwenya, Ph.D Environmental Resources Director 1418 20 <sup>th</sup> Street, Suite 200 Sacramento, CA 95811	<b>Buena Vista Rancheria</b> Rhonda Morningstar Pope Chairperson 1418 20 <sup>th</sup> Street, Suite 200 Sacramento, CA 95811
<b>Central Sierra Me-Wuk Cultural &amp; Historic</b> Reba Fuller Spokesperson PO Box 699 Tuolumne, CA 95379	<b>Chicken Ranch Rancheria of Me-Wuk</b> Lloyd Mathiesen Chairperson P.O. Box 1159 Jamestown, CA 95327

<b>Chicken Ranch Rancheria of Me-Wuk</b> Melissa Powell Cultural Resources Coordinator P.O. Box 1159 Jamestown, CA 95327	<b>Picayune Rancheria of the Chukchansi Indians</b> Nancy Ayala Chairperson 46575 Road 417 #A Coarsegold, CA 93614
<b>Picayune Rancheria of the Chukchansi Indians</b> Mary Motola Cultural Specialist 46575 Road 417 #A Coarsegold, CA 93614	<b>Southern Sierra Miwuk Nation</b> Jay Johnson Spiritual Leader 5235 Allred Road Mariposa, CA 95338
<b>Southern Sierra Miwuk Nation</b> Lois Martin Chairperson P.O. Box 1200 Mariposa, CA 95338	<b>Southern Sierra Miwuk Nation</b> Les James Spiritual Leader P.O. Box 1200 Mariposa, CA 95338
<b>Southern Sierra Miwuk Nation</b> Anthony Brochini Cultural Resources Representative P.O. Box 1200 Mariposa, CA 95338	<b>Tuolumne Band of Me-Wuk Indians</b> Kevin Day Chairperson P.O. Box 699 Tuolumne, CA 95379
<b>Tuolumne Band of Me-Wuk Indians</b> Stanley Rob Cox Cultural Resources Department P.O. Box 699 Tuolumne, CA 95379	<b>Tuolumne Band of Me-Wuk Indians</b> Vicki Stone Cultural Coordinator P.O. Box 699 Tuolumne, CA 95379
<b>Tuolumne Band of Me-Wuk Indians</b> Reba Fuller Spokesperson P.O. Box 699 Tuolumne, CA 95379	



VERIFICATION

This Application is executed in the  
State of California  
County of Stanislaus

by: Casey Hashimoto, P.E.  
General Manager  
Turlock Irrigation District  
P.O. Box 949  
Turlock, CA 95381

being duly sworn, deposes and says that the contents of this license application are true to the best of his knowledge or belief. The undersigned applicant has signed the application this 16 day of APRIL, 2014.

*Turlock Irrigation District*

By: Casey Hashimoto

Subscribed and sworn to before me, a Notary Public [Notary Public,  
or title of other official authorized by the state to notarize documents, as appropriate] of  
the State of California, this 16 day of April, 2014.

Tamara Michele Wallenburg

Notary Public

My Commission Expires: February 4, 2015




VERIFICATION

This Application is executed in the  
State of California  
County of Stanislaus

by: Roger VanHoy, P.E.  
General Manager  
Modesto Irrigation District  
P.O. Box 4060  
Modesto, CA 95352

being duly sworn, deposes and says that the contents of this license application are true to the best of his knowledge or belief. The undersigned applicant has signed the application this 16th day of April, 2014.

*Modesto Irrigation District*

By: 

Subscribed and sworn to before me, a Notary Public [Notary Public,  
or title of other official authorized by the state to notarize documents, as appropriate] of  
the State of California, this 16th day of April, 2014.



Notary Public

My Commission Expires: July 16, 2014



**DON PEDRO HYDROELECTRIC PROJECT  
FERC NO. 2299**

**FINAL LICENSE APPLICATION**

**EXECUTIVE SUMMARY**



Prepared by:  
Turlock Irrigation District  
P.O. Box 949  
Turlock, CA 95381

and

Modesto Irrigation District  
P.O. Box 4060  
Modesto, CA 95352

April 2014

## EXECUTIVE SUMMARY

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When it was completed in 1971, the New Don Pedro Project represented the fulfillment of two decades of comprehensive water resource planning on the Tuolumne River. Parties to this planning included Turlock Irrigation District, Modesto Irrigation District, City and County of San Francisco, and the US Army Corps of Engineers. California state agencies were involved as well, including the California Department of Water Resources and the California Department of Fish and Game (now, Department of Fish and Wildlife). The New Don Pedro Project, now simply referred to as the Don Pedro Project, substantially enlarged the water storage capacity on the Tuolumne River by replacing the original Don Pedro Dam built 1.5 miles upstream of the new Don Pedro Dam by the two irrigation districts in 1923. Because the new Don Pedro Project included hydropower generation and inundated federal lands, a license from the Federal Power Commission, predecessor agency to the Federal Energy Regulatory Commission (FERC), was required. License number 2299 was issued with an effective date of April 1966 for a term of 50 years.

By this filing, Turlock and Modesto irrigation districts (collectively, the Districts) are jointly filing with FERC this application for a new license to continue hydropower generation at the Don Pedro Dam. FERC will consider whether, and under what conditions, to authorize the continued generation of hydroelectricity by the Districts at the site. This license application is the culmination of over three years of working with a broad group of interested parties, referred to herein collectively as relicensing participants, under the regulatory framework established by FERC's Integrated Licensing Process, or ILP. At the behest of several relicensing participants, the Districts went well beyond the basic requirements of the ILP by conducting 17 separate Workshops on studies where computer models depicting operations and resources were being developed. More than 35 individual studies of the potential direct, indirect, and cumulative effects of Don Pedro Project operations and maintenance activities have been undertaken as part of relicensing, including extensive studies covering the resources of the lower Tuolumne River. Studies were cooperatively scoped with relicensing participants, then conducted by the Districts with draft results and findings made available for review, comment, and discussion. Comments provided were subsequently addressed by the Districts by either amending the study reports or explaining why a particular comment was not adopted by the Districts. Many relicensing participants devoted a considerable amount of time participating in the expanded ILP, and the Districts extend their sincere appreciation to all the parties involved. Through the active participation in the Workshops, and through the effective use of the ILP's Initial Study Report and Updated Study Report milestones, most of the 35 relicensing studies are now complete and final. However, not all of the studies dealing with the resources of the lower Tuolumne River have been completed, and as further discussed below, the Districts are providing a schedule for completing these studies and preparing any appropriate amendments to this license application.

Many of the studies conducted as part of relicensing have focused on the resources of the lower Tuolumne River; that is, the lower 52 miles of the river extending from the Districts' La Grange Diversion Dam, located at river mile (RM) 52.2, to the confluence with the San Joaquin River. The resources of the lower Tuolumne River have been the subject of almost continuous study since the Don Pedro Project began operations in 1971. Over 150 individual studies, not counting those in relicensing, have been conducted since that time. Many of these studies were

instrumental in supporting a Settlement Agreement in 1995 among many of the parties currently involved in relicensing. This Agreement resulted in new and greater flows being released from Don Pedro Dam to the lower Tuolumne River to benefit fall-run Chinook salmon. The Districts, with the support and cooperation of the City and County of San Francisco, have faithfully and dutifully implemented the terms of the Agreement. However, the numbers of fall-Chinook salmon returning to the lower Tuolumne River have not increased as many hoped or expected.

The reality of the history of the lower Tuolumne River must also be acknowledged if further progress is to be made. The lower Tuolumne River and its associated floodplain have been subjected to considerable adverse disruption and degradation dating back to the California gold rush of the 1850s, both upstream and downstream of the Don Pedro Project. These past and continuing impacts include in-river mining of gold and gravel resulting in extensive degradation of river habitats for fish; substantial modification to floodplains and overbank areas for gravel extraction and agricultural purposes; introduction of numerous non-native fish that actively prey on salmon smolts; the introduction of numerous chemical constituents associated with agricultural runoff; and the depletion of flows due to water resource development and water withdrawals. By equity and common sense, attempting to solve the problems caused by all these past and continuing actions cannot be the responsibility of any single party. Only through a cooperative, multi-party solution is there a realistic chance for substantial improvement to the lower Tuolumne River anadromous fisheries. The resource studies conducted through the relicensing process, along with the numerous prior resource investigations, provide a scientific basis to understand and potentially address the cumulatively affected resources of the lower Tuolumne River.

The Don Pedro Project provides water storage for irrigation and municipal and industrial (M&I) use, flood control, hydroelectric generation, recreation, and natural resource protection (hereinafter, the “Don Pedro Project”). The Don Pedro Project was originally conceived as a water supply project, and is currently operated for the following primary purposes and needs: (1) provide water supply for the co-licensees, Turlock Irrigation District and Modesto Irrigation District for irrigation of over 200,000 acres of prime Central Valley farmland and for M&I use, (2) provide flood control benefits along the Tuolumne and San Joaquin rivers, and (3) provide a water banking arrangement for the benefit of the City and County of San Francisco water supply system, which serves 2.6 million Bay Area water customers.

Hydroelectric generation is a secondary purpose of the Don Pedro Project. Hereinafter, the hydroelectric generation facilities and operations will be referred to as the “Don Pedro Hydroelectric Project”, or the “Project”. As indicated above, the Districts are seeking a new license to continue generating hydroelectric power. Based on the information contained in this application, and other sources of information on the record, FERC will consider whether, and under what conditions, to issue a new license for the continued generation of hydropower at the Districts’ Don Pedro Project. The Districts are providing a complete description of all the facilities and operations of the Don Pedro Project so the effects of the operation and maintenance of the hydroelectric facilities can be distinguished from the effects of the operation and maintenance activities of the overall Don Pedro Project’s flood control and water supply/consumptive use purposes.

Being able to differentiate the effects of the hydropower operations from the effects of the flood control and consumptive use purposes and needs of the Don Pedro Project will aid in defining the scope and substance of reasonable protection, mitigation, and enhancement (PM&E) alternatives to be considered in relicensing. As FERC states in Scoping Document 2 in a discussion related to alternative project operation scenarios: "...alternatives that address the consumptive use of water in the Tuolumne River through construction of new structures or methods designed to alter or reduce consumptive use of water are...alternative mitigation strategies that could not replace the Don Pedro *hydroelectric* project [emphasis added]. As such, these recommended alternatives do not satisfy the NEPA purpose and need for the proposed action and are not reasonable alternatives for the NEPA analysis."

Most of the resource studies required by FERC's study plan determinations under the ILP have been completed, reviewed by relicensing participants, and filed as final with FERC. Where these studies are complete, the Districts have also completed an assessment of potential resource-related PM&E measures. Based on these assessments, the Districts are proposing a number of PM&E measures as described in this license application, including the following:

- Historic Properties Management Plan, including cultural resources education exhibits
- Bald Eagle Management Plan
- Vegetation Management Plan
- Recreation Resource Management Plan, including improvements to the current whitewater boating take-out at the Ward's Ferry Bridge

The Districts are also proposing to increase the hydropower generation capacity of the Project by replacing the existing turbines and uprating the generators of Units 1, 2, and 3. This upgrade would increase maximum generation capacity from the current 203 MW to approximately 244 MW. Upon issuance of a new license, the Districts will complete a final financial feasibility study using the best information available at that time on the California energy market.

Consistent with study schedules approved by FERC through the ILP's study plan determination process, several important studies involving the resources of the lower Tuolumne River have yet to be completed. Until these studies are completed, the Districts are unable to assess the cumulative effects to these resources, or complete the assessment of the costs and benefits of potential PM&E measures to enhance the resources of the lower Tuolumne River. The specific studies yet to be completed and their currently scheduled FERC-filing dates are:

- Lower Tuolumne River Predation Study using a mark-recapture approach – April 2016
- Fall-run Chinook Salmon Otolith Study – February 2015
- Lower Tuolumne River Floodplain Hydraulic Assessment – February 2015
- Non-Native Predator IFIM Assessment – April 2016
- *O. Mykiss* Swim Tunnel Study – February 2015



Once these studies are completed, the Districts will evaluate all relevant data, reports, and models then available for the purpose of identifying appropriate PM&E measures to address the direct, indirect, and cumulative effects of Project operations and maintenance. This assessment may potentially involve the assessment of a number of flow and non-flow measures, and may consider changes to the current operations and maintenance practices of the Districts. The costs of potential measures, their benefit to resources, and their potential impacts to the water supplies of the Districts and the City and County of San Francisco will be determined. Once these assessments are completed, the Districts will prepare any needed amendments to this license application to incorporate the results of the completed studies, the evaluations conducted, and any proposed PM&E measures. The Districts have projected a date of filing of any required amendments to this license application of November 2016. A more detailed schedule for completion of studies and filing any amendments is provided in Exhibit E of this license application.