

FEDERAL ENERGY REGULATORY COMMISSION

Washington, DC 20426

September 30, 2016

OFFICE OF ENERGY PROJECTS

Project No. 2426-227 – California
South SWP Hydropower Project
California Department of Water Resources and
Los Angeles Department of Water and Power

Subject: Scoping Document 1 for the South SWP Hydropower Project

To the Party Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing the Pre-Application Document submitted by the California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) (co-applicants) for relicensing a portion of the South SWP Hydropower Project (FERC No. 2426). The proposed project is located along the West Branch of the California Aqueduct and comprises LADWP's Castaic Development (including Elderberry forebay and Castaic pumping-generating plant) and DWR's Warne Development (including Pyramid Lake and William E. Warne powerplant), both located in Los Angeles County, California.¹

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff intends to prepare an environmental assessment (EA), 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 EA 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 proposed South SWP Hydropower Project. We are also soliciting your comments and suggestions on our preliminary list of issues and alternatives to be addressed in the EA. We are also requesting that you identify any studies that would help provide a framework for

¹ DWR proposes to pursue relicensing of the existing project's remaining development (Devil Canyon), located along the East Branch of the California Aqueduct (and owned solely by DWR), as a separate project (Devil Canyon Project No. 14797), using the Traditional Licensing Process.

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collecting pertinent information on the resource areas under consideration necessary for the Commission to prepare the EA for the project.

We will hold two scoping meetings for the South SWP Hydropower Project to receive input on the scope of the EA. A daytime meeting will be held at 9:00 a.m. on October 26, 2016, at the Embassy Suites by Hilton, 28508 Westinghouse Place, Valencia, California. An evening meeting will be held at 6:00 p.m. on the same day and at the same location. We will also visit the project facilities on October 25, 2016, starting at 9:00 a.m. and ending at or about 3:00 p.m.

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

SD1 is being distributed to both South SWP Hydropower Project's distribution list and the Commission's official mailing list (see section 10.0 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 added to or removed from the mailing list and must clearly identify the following on the first page: **South SWP Hydropower Project No. 2426-227.**

Please review 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 EA for this project, please contact John Mudre at (202) 502-8902 or john.mudre@ferc.gov. Additional information about the Commission's licensing process and the South SWP Hydropower Project may be obtained from our website, www.ferc.gov, or South SWP Hydropower Project's relicensing website, <http://south-swp-hydropower-relicensing.com/>. The deadline for filing comments is **November 29, 2016**. The Commission strongly encourages electronic filings.

Enclosure: Scoping Document 1

cc: Mailing List
Public Files

SCOPING DOCUMENT 1
SOUTH SWP HYDROPOWER PROJECT

CALIFORNIA

PROJECT NO. 2426-227

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

September 2016

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SCOPING DOCUMENT 1

South SWP Hydropower Project, No. 2426-227

1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),² may issue licenses for terms ranging from 30 to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On August 1, 2016, the California Department of Water Resources (DWR) and Los Angeles Department of Water and Power (LADWP) (co-applicants) filed a Pre-Application Document (PAD) and Notice of Intent to seek a new license for the South SWP Project (FERC Project No. 2426).³

The South SWP Project (project) is located along the West Branch of the California Aqueduct and comprises LADWPD's Castaic Development (including Elderberry forebay and Castaic pumping-generating plant) and DWR's Warne Development (including Pyramid Lake and William E. Warne powerplant), both located in Los Angeles County, California, and has a total installed capacity of 1,350 megawatts (MW). The average annual generation of the South SWP Project from 2000 to 2014 was 346 gigawatt-hours (GWh) at the Warne powerplant and 564 GWh at the Castaic powerplant.

Section 3.0 provides a detailed description of the project, and figure 1 shows the project location. Excluding the transmission lines, the project's existing project boundary includes 6,927.8 acres of land, of which 2,807.25 acres are federal lands. Of the federal lands, 2,790.25 acres are on National Forest System (NFS) lands within the Angeles National Forest (ANF) and Los Padres National Forest (LPNF) under the U.S. Department of Agriculture, Forest Service (USFS). ANF manages recreation on NFS lands within both forests surrounding Pyramid Lake. The remaining 17 acres of federal lands are administered by the U.S. Department of the Interior, Bureau of Land Management (BLM).

² 16 U.S.C. § 791(a)-825(r) (2012).

³ The current license for the South SWP Project was issued with an effective date of January 1, 1972, for a term of 50 years and expires on January 31, 2022.

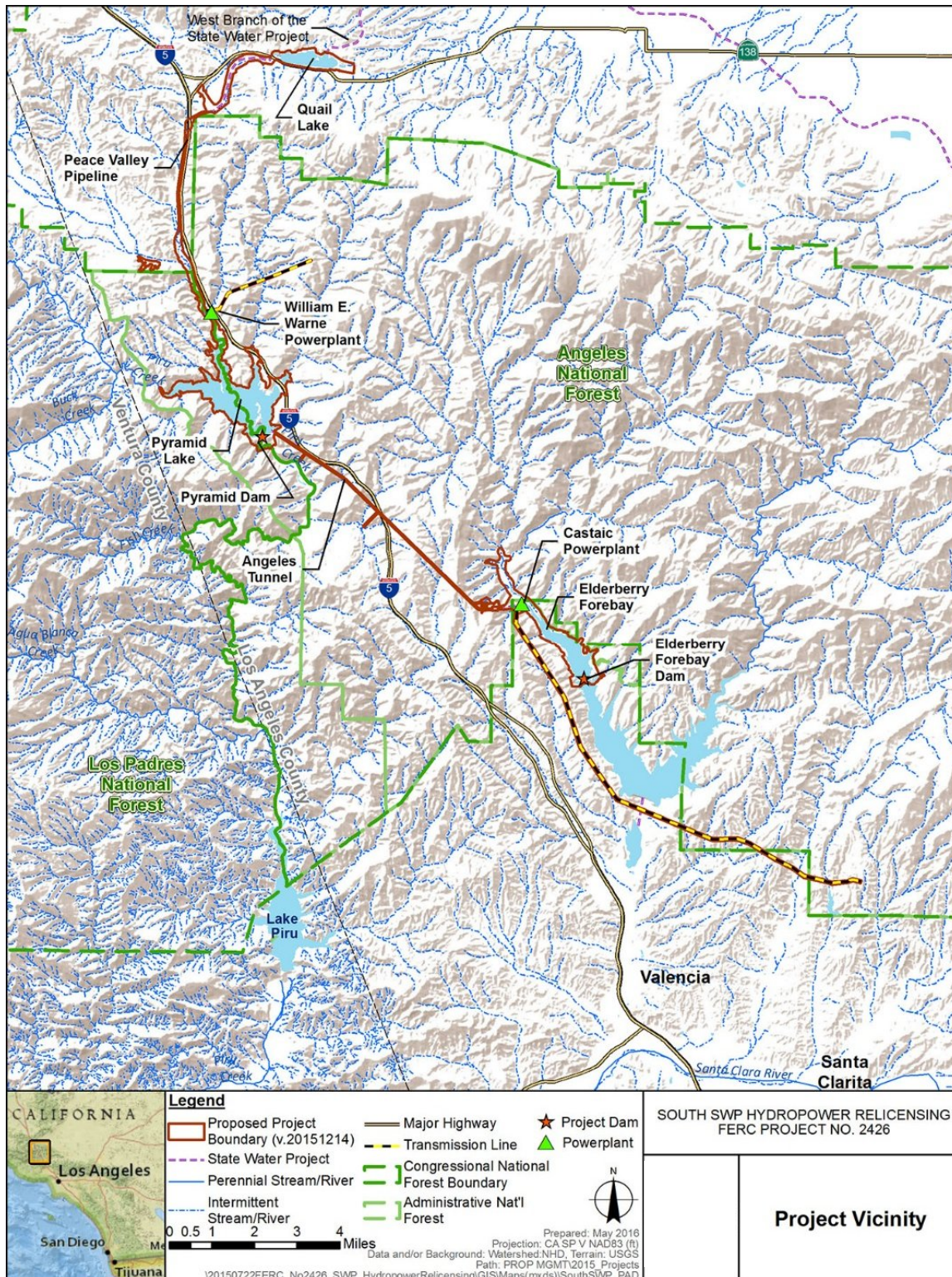


Figure 1. Location of the project (Source: DWR and LADWP, 2016).

The National Environmental Policy Act (NEPA) of 1969,⁴ the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of relicensing the South SWP Project as proposed, and also consider reasonable alternatives to the licensee's proposed action. At this time, we intend to prepare an environmental assessment (EA) 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 EA preparation will be supported by a scoping process to ensure identification and analysis of all pertinent issues.

Although our current intent is to prepare an EA, there is a possibility that an environmental impact statement (EIS) will be required. The scoping process will satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

⁴National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370(f) (2012).

2.0 SCOPING

This Scoping Document 1 (SD1) is intended to advise all participants as to the proposed scope of the EA 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 EA; (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 EA 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. In general, scoping should be conducted during the early planning stages of a 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 EA;
- 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 EA;
- 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 EA, 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 EA;
- in response to the Commission's notice that the project is ready for environmental analysis; and
- after issuance of the draft EA when we solicit written comments on the draft EA.

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 EA. 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: October 26, 2016, at 9:00 a.m.

Location: Embassy Suites by Hilton Valencia
28508 Westinghouse Place
Valencia, CA 91355

Phone Number: (661) 257-3111

Evening Scoping Meeting

Date and Time: October 26, 2016, at 6:00 p.m.

Location: Embassy Suites by Hilton Valencia
28508 Westinghouse Place
Valencia, CA 91355

Phone Number: (661) 257-3111

Environmental Site Review

Date and Time: October 25, 2016, at 9:00 a.m.

Location: Vista Del Lago Visitors Center
38500 Vista Del Lago Road
Gorman, CA 93243

Phone Number: (661) 294-0219

Please notify Gwen Sholl at (916) 557-4554 or Gwen.Sholl@water.ca.gov **on or before October 14, 2016**, if you plan to attend the environmental site review.

The scoping meetings will be recorded by a court reporter, and all statements (oral 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, along with other related information, are posted on the Commission's calendar located on the internet at www.ferc.gov/EventCalendar/EventsList.aspx.

Meeting participants should come prepared to discuss their issues and/or concerns as they pertain to the relicensing of the South SWP 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 (www.ferc.gov), using the "eLibrary" link. Enter the docket number, P-2426, to access the documents. 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 also can be obtained from the South SWP Hydropower relicensing website (<http://south-swp-hydropower-relicensing.com/communications/>) or can be inspected and reproduced, by appointment, at the following addresses: California Department of Water Resources, 2033 Howe Avenue, Suite 220, Sacramento, CA 95825; or Los Angeles Department of Water and Power, 111 North Hope Street, Room 1555-H, 15th Floor, Los Angeles, CA 90012. The public may contact Ms. Molly White, or her designee, by telephone at (916) 557-4553 to make an appointment to review the information at DWR's office. The public may contact Mr. Anton Sy, or his designee, by telephone at (213) 367-2332 to make an appointment to review the information at LADWP's office.

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 EA.

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 EA 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 co-applicants' proposed action, and (3) alternatives to the proposed action.

3.1 NO-ACTION ALTERNATIVE

Under the no-action alternative, the South SWP 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

Warne Development

The major features of the Warne Development include Quail Lake, Lower Quail Canal, Peace Valley pipeline intake embankment, Peace Valley pipeline, Gorman bypass channel, the William E. Warne powerplant (Warne powerplant), switchyard, the transmission line that interconnects Warne powerplant with the SCE Pastoria-Pardee transmission line, recreational facilities, 7.2 miles of primary project roads, and appurtenant facilities.

Quail Lake: Quail Lake (figure 2), which is the uppermost facility of the Warne Development, is a small regulating reservoir along the State Water Project (SWP) that was created by constructing an embankment along a sag pond formed by the San Andreas fault. The lake is located 5 miles southwest of the bifurcation of the East and West branches of the SWP. Quail Lake was constructed in 1967. At a normal maximum water surface elevation (NMWSE) of 3,324.5 feet msl,⁵ Quail Lake has a maximum storage capacity of 8,790 acre-feet and a surface area of about 290 acres. The Quail Lake outlet into Lower Quail canal is a double-box culvert structure that passes beneath State Highway 138. Quail Lake and Lower Quail canal serve as a forebay to Warne powerplant. The Lower Quail canal has an emergency outflow weir that is described in the following subsection, and a spillway is not required for Quail Lake.

⁵ All elevations included in this document are presented in feet above mean sea level (msl).



Figure 2. Aerial view of Quail Lake (Source: staff).

Lower Quail Canal: Water released from Quail Lake through the Quail Lake outlet flows into the 2-mile-long Lower Quail canal. The concrete-lined canal serves as a conveyance to the Peace Valley pipeline intake and is the forebay for the Warne powerplant. Lower Quail canal has a bottom width of 24 feet, northern embankment height of approximately 50 feet, southern embankment height of about 40 feet, and maximum flow capacity of 3,129 cubic feet per second (cfs). The Lower Quail canal storage capacity is 1,150 acre-feet at an elevation of 3,324.5 feet, the same elevation as Quail Lake. An ungated emergency overflow weir is located on the north side of Lower Quail canal. If an unplanned release occurs, water can be discharged over the ungated weir into a detention basin located to the west and adjacent to the southernmost section of Lower Quail Canal.

Peace Valley Pipeline and Peace Valley Pipeline Intake Embankment: The Peace Valley pipeline begins at the Peace Valley pipeline intake embankment. The Peace Valley pipeline intake embankment is a zoned earth and rockfill embankment at the downstream end of the Lower Quail canal. The Peace Valley pipeline intake embankment is 50 feet tall, with a crest length of 350 feet, and crest elevation of 3,330 feet.

SWP water flowing from Quail Lake through Lower Quail canal is routed into the Peace Valley pipeline to Warne powerplant and then to Pyramid Lake. The Peace Valley pipeline, which has a 12-foot diameter and is completely underground, serves as the penstock to the Warne powerplant. It extends about 5.5 miles from the Peace Valley

pipeline intake structure to the Warne powerplant. In the event of a Peace Valley pipeline outage or scheduled SWP water releases exceeding the pipeline's capacity, the water is routed through the Gorman bypass channel directly into Pyramid Lake.

Gorman Bypass Channel: The Gorman bypass channel flow capacity is 700 cfs and conveys SWP water from Lower Quail canal to Pyramid Lake, bypassing the Peace Valley pipeline and Warne powerplant, when necessary, with an alignment generally paralleling that of the Peace Valley pipeline. The man-made channel begins at the Peace Valley pipeline intake embankment and crosses Interstate 5 about 0.7 mile downstream from the embankment. Local drainage, if any, drains into the Bypass channel near Interstate 5.

Warne Powerplant: The Warne powerplant (figure 3), an above-ground, steel-reinforced, concrete powerhouse, is located at the northern (upstream) end of Pyramid Lake, at the terminus of the Peace Valley pipeline. The powerplant has two 37.5-MW Pelton-type generating units. Each turbine has a rated head of 650 feet, runner speed of 200 revolutions per minute (rpm), rated output of 51,000 horsepower (hp), and a rated discharge of 782 cfs. The total combined flow capacity for the powerplant is 1,564 cfs.



Figure 3. Aerial view of Pyramid Lake, Warne powerplant, and switchyard (Source: staff).

Warne Switchyard and Transmission Line: The project includes a 3-mile-long, single-circuit, 220-kilovolt (kV) transmission line that connects output from the project through the Warne switchyard to Southern California Edison's (SCE) Pardee-Pastoria transmission line. The line is built on steel lattice towers along a 150-foot wide right-of-way. The Warne switchyard is located west and immediately adjacent to the Warne powerplant and contains two generator step-up transformers.

Castaic Development

The major features of the Castaic Development include Pyramid dam, Pyramid Lake, the Angeles tunnel and seven penstocks, the Castaic powerplant and switchyard, the Elderberry forebay and dam, storm bypass channel and check dams, the transmission lines that interconnect Castaic switchyard with the Independent System Operator (ISO) power grid, and approximately 3.9 miles of access roads. DWR owns and operates the facilities above the surge chamber at the southeastern end of the Angeles tunnel, and LADWP owns and operates the remainder of the facilities, including the surge chamber.

Pyramid Dam: Pyramid dam (figure 3), at the southern end of Pyramid Lake, is a 1,090-foot-long, 400-foot-high zoned earth and rock fill dam. The crest of the dam is 35 feet wide with an elevation of 2,606 feet. Water is typically released from a low-level outlet to an 18-mile-long section of Piru Creek (Pyramid reach), which extends from Pyramid dam to the NMWSE of Lake Piru.

Pyramid dam has two spillways, a gate-controlled spillway, and an uncontrolled emergency spillway. The gated spillway is controlled by a single radial gate that measures 40 feet wide by 31 feet tall and consists of a concrete-lined chute terminating in a flip bucket. The low-level outlet works use the stream bypass tunnel (diversion tunnel) used during construction of the dam. This stream release facility is a 15-foot-diameter, concrete-lined tunnel about 1,350 feet long through the right abutment of the dam, and is used for downstream releases to Pyramid reach. Seepage through the dam is also collected at the toe of the dam, where it is gaged before being released into Pyramid reach. The maximum safe, designed release from the low-level outlet of Pyramid dam to Pyramid reach is 18,000 cfs.

Pyramid Lake: Pyramid Lake (figure 3) serves as regulated storage for the Castaic powerplant. At a NMWSE of 2,578 feet, Pyramid Lake has a storage capacity of 169,902 acre-feet and a usable storage capacity of 22,221 acre-feet. Current operating agreements limit fluctuation of the lake to only the upper 19 feet under normal operating conditions, thus making the usable storage only a small fraction of the total storage available in the lake. Pyramid Lake also serves as emergency storage for the SWP. The lake has a normal maximum surface area of approximately 1,300 acres, a shoreline length of approximately 21 miles, and a maximum depth of approximately 280 feet.

Approximately 3 percent of the total inflow to Pyramid Lake is from natural inflow; the majority of the inflow to the lake is SWP water. Pyramid Lake receives natural inflow into the west arm of the lake from Piru Creek, and a combination of natural and SWP water inflows into the north arm of the lake from Gorman bypass channel and Gorman Creek.

Angeles Tunnel and Penstocks: Angeles tunnel, the principal outlet from Pyramid Lake, supplies water to the Castaic powerplant in the generating mode and returns water to the lake from Elderberry forebay when the powerplant is operating in the pumping mode. Angeles tunnel is 7.2 miles long, has a diameter of 30 feet, and has a maximum flow capacity of 18,400 cfs.

The penstock assembly for the six units in the Castaic powerplant consists of a double trifurcation immediately downstream of the south portal of Angeles tunnel, a penstock shutoff valve on each branch of the trifurcations, and six 2,200-foot-long steel penstocks ranging in diameter from 9 feet to 13.5 feet serving the six powerhouse units (Unit Nos. 1-6). Unit No. 7 powerplant is served by a 1,900-foot-long steel penstock ranging in diameter from 7 feet to 9 feet branching from a Y-connection between the tunnel portal and the main trifurcation. Combined flow capacity for all seven penstocks is 17,840 cfs.

Castaic Powerplant: The Castaic powerplant (figure 4), an aboveground/underground, steel-reinforced, concrete powerhouse, is located on the northern (upstream) end of Elderberry forebay and is a pump-generating plant with the ability to pump water back to Pyramid Lake using off-peak energy when it is economical to do so. Elderberry forebay serves as an afterbay for the Castaic powerplant while in generating mode and as a forebay while in pumping mode. Pyramid Lake serves as the upper reservoir for the powerplant.

The powerplant has six Francis-type pump-turbine units each with a rated head of 1,048 feet, a runner speed of 257 rpm, a rated output of 355,000 hp, and an estimated rated discharge of 3,500 cfs. It also has one Pelton-type pump starting turbine unit with a rated head of 950 feet, a runner speed of 225 rpm, rated output of 69,000 hp, and an approximate rated discharge of 752 cfs. These seven units have a combined generating capacity of 1,275 MW with a plant hydraulic capacity of 17,840 cfs.



Figure 4. Aerial view of Elderberry forebay, Angeles penstock, and Castaic powerplant (Source: staff).

Elderberry Forebay Dam and Forebay: Elderberry forebay dam (figure 4), completed in 1974, is a 1,990-foot-long, 200-foot-high zoned earthfill dam. The crest of the dam is 25 feet wide with an elevation of 1,550 feet. The outlet tower, located approximately 400 feet upstream of Elderberry forebay dam, includes: one 5-foot-wide by 6-foot-high main gate, six 8-foot-wide by 12-foot-high lower gates, two 8-foot-wide by 9-foot-high upper gates, twelve 13-foot-wide by 12-foot-high storm gates, and one 5-foot-wide by 6-foot-high guard gate. The outlet tower connects to a 21-foot-diameter conduit that runs under Elderberry forebay dam and releases water into Castaic Lake (a non-project facility).

An overflow weir built into a natural topographic saddle located approximately 300 feet east of the left abutment of the dam serves as an uncontrolled emergency spillway. The crest elevation of the overflow weir is 1,540 feet, with a capacity of at least 12,000 cfs. Elderberry forebay dam, including this emergency spillway, is the most downstream project facility.

Elderberry forebay serves as an afterbay for the Castaic powerplant when the plant is generating power, and as a forebay when the plant is pumping water back to Pyramid

Lake. The forebay also receives a small amount of local inflow from Castaic Creek, which enters at the northern end of the reservoir. Of the total inflow to Elderberry forebay, only 1 percent is from Castaic Creek. The remaining inflow to Elderberry forebay is SWP water from Pyramid Lake conveyed via the Angeles tunnel. At a NMWSE of 1,530 feet, Elderberry forebay has a storage capacity of 28,231 acre-feet, a surface area of 500 acres, and a shoreline length of 7 miles.

Storm Bypass Channel and Check Dams: The Storm bypass channel is on Castaic Creek above Elderberry forebay and includes a series of three check-dam basins with a total area of approximately 21 acres, designed to capture sediment runoff during high flow events to reduce the accumulation of sediment near the powerplant and ensure the sustained efficiency of the Castaic powerplant operation. Sediment and debris are removed from the check-dam basins as needed, and spoils are disposed of onsite on state-owned lands.

Castaic Switchyard and Transmission Line: The Castaic switchyard is a fenced switchyard located adjacent to the powerhouse. An 11.4-mile-long, 230-kV transmission line delivers energy from the Castaic switchyard to the Haskell Junction substation, and transmits energy to the Castaic powerplant when in the pump-back operating mode. The line consists of three circuits, but LADWP filed a non-capacity license amendment with FERC on March 10, 2016, to construct the fourth transmission line from Castaic switchyard to Haskell Junction.

Recreation Facilities

The co-applicants operate and maintain the following recreation facilities.

Quail Lake: Recreational amenities, such as shoreline access, parking, restrooms, and fishing, are available at Quail Lake. However, the lake is hike-in only, and there is no boating, swimming, or other recreation activity there.

Pyramid Lake: Recreational amenities at Pyramid Lake include extensive day-use facilities and boat docks and a large, overnight campground nearby. The Los Alamos Campground, located about 2 miles northwest of Pyramid Lake, is part of the licensed recreation facilities for the project. The campground provides 93 individual campsites and 3 group campsites, and is managed by Parks Management Company under a concessionaire contract with DWR.

The Vista del Lago Visitors Center is located on the east side of Pyramid Lake. The Vista del Lago Visitors Center provides many different interpretive displays used to educate and inform the public on the SWP, the facilities, their purpose and operations, and public safety aspects.

3.1.2 Existing Project Operations

Warne Development

Quail Lake and Quail Canal: Quail Lake and Lower Quail canal serve as a forebay to the Warne powerplant and receive flow from the Oso pumping plant (non-project facility) 2.8 miles upstream. Quail Lake waters pass into Pyramid Lake through the Warne powerplant via Lower Quail canal and the Peace Valley pipeline, with excess flow passing through the Gorman bypass channel. Some losses in flow occur through these facilities, with annual average losses between 2000 through 2014 between Quail Lake and Pyramid Lake of approximately 10,000 acre-feet, calculated using the operational data for the difference in inflow to Quail Lake and the outflow to the Peace Valley pipeline and the Gorman bypass channel. Otherwise, the SWP water is preserved in this section of the project. The only source of water used for Warne powerplant generation is SWP water, and there is no natural inflow to Quail Lake or Lower Quail canal.

Gorman Bypass and Peace Valley Pipeline: The portion of SWP water conveyed through Gorman bypass channel has varied widely between years due to Warne powerplant generation capability or maintenance of the Peace Valley pipeline. The Gorman bypass channel did not pass any flow from 2000 through 2006, and conveyed flows less than 25 percent of the days in any month from 2007 to 2014. From 2007 through 2014, Gorman bypass channel flows ranged from a maximum of approximately 22 percent in 2009, to a minimum of less than 1 percent of Quail Lake releases in 2013. Deliveries through the Gorman bypass channel were particularly high in 2007 through 2009, in part because maintenance work on the Peace Valley pipeline limited its conveyance capacity. Similarly, releases to the Gorman bypass channel vary widely on a daily basis, with large flows occurring during a small number of days each year, and little to no flow occurring in the remaining days.

Warne Powerplant: The total combined flow capacity for the Warne powerplant is 1,564 cfs. The project receives flow from the Oso pumping plant located 2.8 miles upstream. The powerplant has a licensed authorized installed capacity of 75 MW with average annual generation of 346 gigawatt-hours (GWh) and average monthly generation of 29 GWh during the period of 2000 through 2014. The powerplant has a dependable capacity of 20.7 MW, which is based on the average generation during 2014, a critically dry year.

Castaic Development

Castaic Powerplant: The Castaic powerplant generates electricity during on-peak periods, typically weekday daylight hours, when extra power is needed in the Los Angeles area. During off-peak periods, typically nights and Sundays, the powerplant pumps water

from Elderberry forebay back into Pyramid Lake for storage until it is needed for power generation. This water can be routed through the turbine generators in a short time to meet peak and/or unanticipated demands on LADWP's electric system. The pumping function at the Castaic powerplant improves the availability of water for peak power generation, which enhances the power generation benefits to the Los Angeles area.

The seven turbine units at the Castaic powerplant have a combined licensed generating capacity of 1,275 MW with a plant hydraulic capacity of 17,840 cfs. Pumping capability at normal static head ranges from 2,200 cfs with one unit operating to about 12,000 cfs with six units pumping. The powerplant's dependable capacity for 2014 was 20.1 MW. The dependable capacity is the average powerplant generation (MW) over a year. Because the Castaic powerplant is a pumped storage facility, it is capable of generating at or near plant capacity, if needed, for a period of a few hours.

Pyramid Lake: There are several major operational constraints for the project regarding lake levels and Pyramid reach releases. For Pyramid Lake, per the 1970 Amendment No. 1 to the 1969 Memorandum of Understanding between DWR and USFS, during normal operations, water surface level variations do not exceed 14 feet during each 7-day period beginning midnight each Sunday, and do not exceed 8 feet on a daily basis. In addition, the water surface of Pyramid Lake is not lowered below an elevation of 2,560 feet without taking additional safety precautions and making appropriate notifications.

Article 58 of the existing license also requires the licensees to maintain Pyramid Lake surface elevations at the highest, most practicable levels commensurate with other project purposes during the summer recreation season.

Pyramid Lake operation is also subject to an agreement between the licensees that places additional constraints on Pyramid Lake operation. Under normal operating conditions, the lake level is maintained at an elevation of at least 2,567 feet, and the releases out of Pyramid Lake through Angeles tunnel are balanced with the SWP water deliveries into Pyramid Lake on a weekly basis.

According to Article 52 of the license, as amended in 2005, outflows from Pyramid dam to Pyramid reach are required to match natural inflow to Pyramid Lake to the extent operationally feasible and consistent with safety requirements. Article 52 also states that any natural flows above the maximum safe release from Pyramid Lake to Pyramid reach can be appropriated according to the conditions of existing water rights. DWR holds water right permit number 18709 (priority date May 3, 1979) authorizing the appropriation of water from Piru Creek at Pyramid Lake when flows are greater than the demands of the downstream water users. United Water Conservation District (UWCD)

also holds water rights to natural flow in Piru Creek and stores SWP water for the Ventura County Watershed Protection District (VCWPD).

Water is discharged from Pyramid Lake to Pyramid reach for delivery to UWCD, which, under Article 52, allows for the delivery of up to 3,150 acre-feet of SWP water via Piru Creek to UWCD on behalf of VCWPD between November 1 and the end of February each year. UWCD also has appropriative rights to natural flow in Piru Creek under water right permit numbers 11181 (priority date September 18, 1947) and 19373 (priority date March 25, 1982). In addition, SWP water is delivered from Pyramid Lake to support lake recreation in Castaic Lake.

3.2 APPLICANTS' PROPOSAL

3.2.1 Proposed Project Facilities and Operations

DWR and LADWP propose to continue to operate and maintain the South SWP Project as required by its existing license. The co-applicants do not propose any new development or changes in project operation at this time. However, the co-applicants are proposing to modify the existing project boundary to encompass all project facilities, including all project recreation developments, while removing lands that are not related to project functions (figure 5).

The co-applicants also propose to include the existing Quail detention embankment as a project facility. The Quail detention embankment is located adjacent to the Peace Valley pipeline intake embankment, along the northwest portion of the Lower Quail canal. The Quail detention embankment serves as a flood-management structure to attenuate waters from Quail Lake or the Lower Quail canal, and to protect Interstate 5 if an unplanned release of water occurs from these facilities.

The Quail detention embankment has a crest length of 1,840 feet, a maximum height of 50 feet above original ground surface. The nominal crest elevation is 3,255 feet, and the crest width is 40 feet. The detention basin behind the Quail detention embankment has a volume of 1,100 acre-feet at an elevation of 3,250 feet. In the event of an unplanned release of water from Lower Quail canal or Quail Lake, releases from the Quail detention embankment outlet pass under the Gorman Creek Bridge of Interstate 5 and flow down Gorman Creek to Pyramid Lake.



Figure 5. Proposed changes to the project boundary (Source: DWR and LADWP, 2016).

3.2.2 Proposed Environmental Measures

The co-applicants propose the following environmental measures:

Aquatic Resources

- Continue to implement the requirements of Article 51 for protecting and enhancing fish and wildlife resources, including trout stocking in Pyramid Lake.
- Continue to implement the requirements of Article 52 by releasing from Pyramid dam to Pyramid reach a flow equal to the natural inflow to Pyramid Lake.
- File a Pyramid reach trout stocking plan with FERC upon the conclusion of Section 7 consultations with FWS and the National Marine Fisheries Service to determine the effects of trout stocking on federally listed species in the Pyramid reach.

Terrestrial Resources

- Continue to implement the requirements of Article 51 for protecting and enhancing wildlife resources.

Threatened and Endangered Species

- Continue to implement the requirements of Article 51 for protecting and enhancing wildlife resources, including surveys for listed amphibians.

Recreation, Land Use, and Aesthetics

- Continue to implement requirements of Article 58 for maintaining lake levels for recreation purposes in Silverwood Lake and Pyramid Lake.

Cultural Resources

- No proposed measures.

3.3 DAM SAFETY

It is important to note that dam safety constraints may exist and should be taken into consideration in the development of proposals and alternatives considered in the pending proceeding. For example, proposed modifications to the dam structure, such as the addition of flashboards or fish passage facilities, could impact the integrity of the dam

structure. As the proposal and alternatives are developed, the applicants must evaluate the effects and ensure that the project would meet the Commission's dam safety criteria found in Part 12 of the Commission's regulations and the engineering guidelines (<http://www.ferc.gov/industries/hydropower/safety/guidelines/eng-guide.asp>).

3.4 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 measures identified by the Commission, the agencies, Indian tribes, NGOs, and the public.

3.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

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

3.5.1 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 South SWP 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.

3.5.2 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 and consumptive water 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 (40 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 and other land and water development activities.

4.1.1 Resources that could be Cumulatively Affected

Based on information in the PAD for the South SWP Project, and preliminary staff analysis, we have identified water quality (dissolved oxygen and water temperature) and fisheries as resources that could be cumulatively affected by the proposed continued operation and maintenance of the South SWP Project in combination with other hydroelectric projects and other activities in the Santa Clara River Basin.

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 Santa Clara River Basin. We have identified the geographic scope for water quality to include the Piru Creek Basin from Pyramid Lake to the confluence of Piru Creek with the Santa Clara River, and Castaic Creek from the Elderberry forebay to Castaic Lake. We chose this geographic scope because the operation and maintenance of the South SWP Project, in combination with other water development activities in these drainages may cumulatively affect water quality through the geographic reaches identified. We have identified the geographic scope for fishery resources to include the Piru Creek Basin from Pyramid Lake to the confluence of Piru Creek with the Santa Clara River, and to the Elderberry forebay within the Castaic Creek drainage. We chose this geographic scope because the operation and maintenance of the South SWP Project, in combination with other water development activities in these drainages may cumulatively affect fishery resources through the geographic reaches identified.

4.1.3 Temporal Scope

The temporal scope of our cumulative effects analysis in the EA 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 EA. We identified these issues, which are listed by resource area, by reviewing the PAD and the Commission's record for the South SWP Project. This list is not intended to be exhaustive or final, but contains the issues raised to date. 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 EA. Those issues identified by an asterisk (*) will be analyzed for both cumulative and site-specific effects.

4.2.1 Geologic and Soils Resources

- None.

4.2.2 Aquatic Resources

- Effects of continued project operation on dissolved oxygen and water temperature in Pyramid Lake, Piru Creek, and Elderberry forebay.*
- Effects of continued project operation on streamflows and aquatic habitat in Piru Creek, affecting trout, other resident and special status fishes, amphibians, and benthic macroinvertebrates.*
- Effects of continued reservoir operations on aquatic resources in Quail Lake, Pyramid Lake, and Elderberry forebay, associated with reservoir level fluctuations.
- Effects of continued project operation on implementation of the National Marine Fisheries Service Southern California Steelhead Recovery Plan (2012), which includes priority recovery actions for habitat enhancement and fish passage on Piru Creek, including Pyramid dam.*
- Effects of ongoing fish entrainment at the Warne powerplant and Castaic pump-generating station, including effects on special status species.*

- Effects of continued project operation and related recreational use on the introduction and spread of aquatic invasive species.

4.2.3 Terrestrial Resources

- Effects of continued project operation on riparian and wetland habitat and associated wildlife, including waterfowl and wetland-dependent birds.
- Effects of continued project operation and maintenance on upland wildlife habitat and associated wildlife, including effects of non-native invasive plants.
- Effects of continued project operation and maintenance on special-status wildlife and botanical species.

4.2.4 Threatened and Endangered Species

- Effects of continued project operation and maintenance on federally listed and proposed endangered, threatened, and candidate species.

4.2.5 Recreation Resources

- Effects of continued project operation on recreational use in the project area, including the capacity and adequacy of existing recreational access and facilities.

4.2.6 Cultural Resources

- Effects of continued project operation on historic properties and archaeological resources.

4.2.7 Developmental Resources

- Economics of the project and the effects of any recommended environmental measures on the project's economics.

5.0 PROPOSED STUDIES

Depending upon the findings of studies completed by the co-applicants and the recommendations of the consulted entities, the co-applicants will consider, and may propose, certain other measures to enhance environmental resources affected by the project as part of the proposed action. Table 1 identifies the co-applicants' initial study proposals by resource area; the PAD contains detailed information on the co-applicants' initial study proposals. Further studies may need to be added to this list based on comments provided to the Commission and the co-applicants from interested participants, including Indian tribes.

Table 1. DWR and LADWP's initial study proposals for the South SWP Project.
(Source: South SWP Project PAD)

Resource Area	Proposed Study
Aquatic Resources	
	Determine the presence, absence, and relative abundance of aquatic invasive species in project waters.
	Conduct a baseline study to characterize existing fish populations in Quail Lake.
	Conduct a baseline study to characterize existing fish populations in Pyramid reach.
	Survey potential habitat for special status aquatic amphibians and semi-aquatic snakes within the proposed project boundary and provide results of surveys within these identified habitats in relation to project facilities and normal operation and maintenance activities.
Terrestrial Resources	
	Map and characterize existing vegetative cover, wetland conditions, and riparian conditions within the proposed project boundary. Document occurrence of federal- and state-listed rare, threatened, or endangered botanical species.
	Conduct surveys to determine the presence and general quantity of non-native invasive plants in the proposed project boundary.
	Conduct an assessment of the occurrence and distribution of suitable habitat for federal- and state-listed rare, threatened, or endangered animal species within the proposed project boundary.

Resource Area	Proposed Study
	Conduct surveys, following California Department of Fish and Wildlife protocols, to determine presence or absence, distribution, and relative abundance of Endangered Species Act (ESA)-listed plants in the proposed boundary, excluding lands overlying the Angeles tunnel on which licensees do not perform any project activities.
	Conduct site-specific habitat suitability assessment for California red-legged frog within the proposed boundary, excluding the Pyramid reach, where surveys for this species already occur annually.
	Conduct surveys, following FWS standard protocols, to identify breeding habitat for southwest willow flycatcher and least Bell's vireo in the proposed project boundary.
Recreation, Land Use, and Aesthetics	
	Conduct an inventory and comprehensive assessment of project recreation facilities.
Cultural Resources	
	Determine the location of historic properties within the proposed project boundary, excluding lands overlying the Angeles tunnel on which licensees do not perform any project activities.
	Determine the location of tribal resources within the proposed project boundary, excluding lands overlying the Angeles tunnel on which licensees do not perform any project activities.

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 South SWP 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 EA, EIS, or similar environmental study (previous, ongoing, or planned) relevant to the proposed relicensing of the South SWP 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 EA 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 **November 29, 2016**. All filings must clearly identify the following on the first page: **South SWP Project (P-2426-227)**. 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, please send a paper copy 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 <mailto:ferconlinesupport@ferc.gov>.

Any questions concerning the scoping meetings, site visits, or how to file written comments with the Commission should be directed to John Mudre at (202) 502-8902 or john.mudre@ferc.gov. Additional information about the Commission's licensing process and the South SWP Project may be obtained from the Commission's website, www.ferc.gov.

7.0 EA PREPARATION

At this time, we anticipate the need to prepare a draft and final EA. The EA will be sent to all persons and entities on the Commission's service and mailing lists for the South SWP Project. The EA will include our recommendations for operating procedures, as well as environmental protection and enhancement measures that should be part of any license issued by the Commission. All recipients will then have 30 days to review the EA and file written comments with the Commission.

The major milestones, with pre-filing target dates, are as follows:

<u>Major Milestone</u>	<u>Target Date</u>
Scoping Meetings	October 2016
Co-applicants file Final License Application	January 2020
Ready for Environmental Analysis Notice Issued	-
Deadline for Filing Comments, Recommendations, and-Agency Terms and Conditions/Prescriptions	-
Draft EA Issued	-
Comments on EA Due	-
Deadline for Filing Modified Agency Recommendations	-
Final EA Issued	-
Order Issued	-

Post-filing milestones will be established following the co-applicants' filing of the final license application. A copy of the co-applicants' process plan and schedule, which has a complete list of pre-filing relicensing milestones for the South SWP Project, including those for developing the license application, is attached as appendix B to this SD1.

8.0 PROPOSED EA OUTLINE

The preliminary outline for the South SWP Project EA is as follows:

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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 South SWP 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 with the Commission that may be relevant to the South SWP Project.

California Department of Fish and Game. U.S. Fish and Wildlife Service. 2010. Final Hatchery and Stocking Program Environmental Impact Report/Environmental Impact Statement. Sacramento, California. January 2010.

California Department of Fish and Game. 2007. California Wildlife: Conservation Challenges, California's Wildlife Action Plan. Sacramento, California. 2007.

California Department of Fish and Game. 1996. Steelhead Restoration and Management Plan for California. February 1996.

California Department of Fish and Game. 2003. Strategic Plan for Trout Management: A Plan for 2004 and Beyond. Sacramento, California. November 2003.

California Department of Fish and Wildlife. 2008. California Aquatic Invasive Species Management Plan. Sacramento, California. January 18, 2008.

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. 1994. California Outdoor Recreation Plan. 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.

California Department of Water Resources. 1994. California Water Plan Update. Bulletin 160-93. Sacramento, California. October 1994. Two Volumes and Executive Summary.

California State Water Resources Control Board. 1995. Water Quality Control Plan Report. Sacramento, California. Nine Volumes.

Forest Service. 2005. Los Padres National Forest Land and Resource Management Plan. Department of Agriculture, Goleta, California. September 2005.

Forest Service. 2005. Angeles National Forest Land and Resource Management Plan. Department of Agriculture, Arcadia, California. September 2005.

National Marine Fisheries Service. Pacific Fishery Management Council. 1978. Fishery Management Plan for Commercial and Recreational Salmon Fisheries Off the Coasts of Washington, Oregon and California Commencing in 1978. March 1978.

National Park Service. The Nationwide Rivers Inventory. Department of the Interior, Washington, D.C. 1993.

Pacific Fishery Management Council, Portland. 1988. Eighth Amendment to the Fishery Management Plan for Commercial and Recreational Salmon Fisheries Off the Coasts of Washington, Oregon and California Commencing in 1978. Portland, Oregon. January 1988.

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. Canadian Wildlife Service. 1986. North American Waterfowl Management Plan. Department of the Interior. Environment Canada. May 1986.

U.S. Fish and Wildlife Service. N.D. Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service. Washington, D.C.

Los Angeles County. 2015. Los Angeles County General Plan. Los Angeles, California. March 2015.

South Coast Air Quality Management District. 2013. Final 2012 Air Quality Management Plan. Diamond Bar, California. February 2013.

United States Fish and Wildlife Service. 1999. Arroyo Southwestern Toad (*Bufo microscaphus californicus*) Recovery Plan. Portland, Oregon. July 1999.

10.0 MAILING LIST

The list below is the Commission's official mailing list for the South SWP Project (FERC No. 2426). If you want to receive future mailings for the South SWP 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: South SWP Project No. 2426-227. 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.

Official Mailing List for the South SWP Project

KEN KULES 3235 LOMBARDY ROAD PASADENA, CA 91107	ESMERALDA BRACAMONTE CA AQUEDUCT PROJECT 110 N. WABASH AVENUE GLENDORA, CA 91741
JIM CANADAY SENIOR ENVIRONMENTAL SCIENTIST CALIFORNIA DEPARTMENT OF WATER RESOURCES 1001 I ST SACRAMENTO, CA 95814	MICHAEL SWIGER, PARTNER VAN NESS FELDMAN, LLP 1050 THOMAS JEFFERSON STREET, NW 7TH FLOOR WASHINGTON, DC 20007
HENRY MICHAEL RAMIREZ RELICENSING PROGRAM MANAGER CALIFORNIA DEPARTMENT OF WATER RESOURCES 1416 NINTH STREET, 12TH FLOOR SACRAMENTO, CA 95814	TED CRADDOCK CALIFORNIA DEPARTMENT OF WATER RESOURCES PO BOX 942836 SACRAMENTO, CA 94236-0001
CALIFORNIA PUBLIC UTILITIES COMMISSION CHAIRMAN 505 VAN NESS AVE SAN FRANCISCO, CA 94102-3214	STEPHEN J WHYLD, DIRECTOR CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT 3900 MAIN ST RIVERSIDE, CA 92522-0001

<p>CALIFORNIA TROUT C/O AMY BRICKER, ATTORNEY SHUTE, MIHALY & WEINBERGER 396 HAYES ST. SAN FRANCISCO, CA 94102</p>	<p>HEIME R. AGUILLERA, DIRECTOR COMMUNITY DEVELOPMENT DIRECTOR CITY OF COLTON 650 N LA CADENA DR COLTON, CA 92324-2823</p>
<p>CLERK OF THE BOARD COUNTY OF KERN COUNTY ADMINISTRATIVE CENTER 1115 TRUXTUN AVENUE BAKERSFIELD, CA 93301</p>	<p>DAVID LUKER, GENERAL MANAGER DESERT WATER AGENCY PO BOX 1710 PALM SPRINGS, CA 92263-1710</p>
<p>PETER BROY, DIRECTOR OF PLANNING CITY OF FONTANA 8353 SIERRA AVE FONTANA, CA 92335-3528</p>	<p>GARY NORDOR LEWISTON COMMUNITY SERVICES DISTRICT PO BOX 33 LEWISTON, CA 96052-0033</p>
<p>ARTHUR S KEARNEY, DIRECTOR CITY OF LOMA LINDA 25541 BARTON RD LOMA LINDA, CA 92354-3125</p>	<p>JOHN C. KOKOSKA DIR. OF INTERNAL GENERATION LADWP 111 N HOPE ST., RM 949 LOS ANGELES, CA 90012</p>
<p>SYNDI DRISCOLL DEPUTY CITY ATTORNEY-- LADWP LOS ANGELES DEPARTMENT OF WATER & POWER 111 NORTH HOPE ST., RM 340 LOS ANGELES, CA 90012</p>	<p>RANDY S. HOWARD DIR. OF RES. PLANNING LOS ANGELES DEPARTMENT OF WATER & POWER 111 NORTH HOPE STREET SUITE 921 LOS ANGELES, CA 90012</p>
<p>GREGORY HUYNH LOS ANGELES DEPARTMENT OF WATER & POWER 111 N. HOPE ST RM 916 LOS ANGELES, CA 90012</p>	<p>SIMON ZEWDU, MANAGER OF STRATEGIC INITIATIV LOS ANGELES DEPARTMENT OF WATER & POWER 111 NORTH HOPE STREET, RM 921 LOS ANGELES, CA 90012</p>
<p>METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA PO BOX 54153 LOS ANGELES, CA 90054-0153</p>	<p>MICHAEL POSTAR, ATTORNEY DUNCAN, WEINBERG, GENZER & PEMBROKE PC 1615 M ST., NW SUITE 800 WASHINGTON, DC 20036</p>

<p>STEPHEN N ARAKAWA METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA PO BOX 54153 LOS ANGELES, CA 90054-0153</p>	<p>JOHN SCHLOTTERBECK METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA PO BOX 54153 LOS ANGELES, CA 90054-0153</p>
<p>DIRK MARKS METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA PO BOX 54153 LOS ANGELES, CA 90054-0153</p>	<p>MARK PARSONS SENIOR DEPUTY GENERAL COUNSEL METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA BOX 54153 LOS ANGELES, CA 90054</p>
<p>KIMBERLY SPEECH 501 W. OCEAN LONG BEACH, CA 90802</p>	<p>ROD TAYLOR DIRECTOR CITY OF RIALTO 150 S PALM AVE RIALTO, CA 92376-6406</p>
<p>ROGER STREETER, PLANNING DIRECTOR COUNTY OF RIVERSIDE, 4080 LEMON ST RIVERSIDE, CA 92501-3679</p>	<p>BRAD KILGER DIRECTOR PO BOX 1318 SAN BERNARDINO, CA 92418-0001</p>
<p>CO.OF SAN BERNADINE CA. CHAIRMAN COUNTY OF SAN BERNARDINO 385 N ARROWHEAD AVE SAN BERNARDINO, CA 92415-0001</p>	<p>MICHELLE LOBO ENVIRONMENTAL SCIENTIST SWRCB P.O. BOX 2000 SACRAMENTO, CA 95812-2000</p>
<p>TOWN OF TAFT 209 E KERN ST TAFT, CA 93268-3224</p>	<p>COMMANDER U.S. ARMY CORPS OF ENGINEERS SAN FRANCISCO DISTRICT OFFICE 1455 MARKET ST, #1760 SAN FRANCISCO, CA 94103</p>
<p>KERRY O'HARA ASSISTANT REGIONAL SOLICITOR U.S. DEPARTMENT OF INTERIOR 2800 COTTAGE WAY, RM. E-1712 SACRAMENTO, CA 95825</p>	<p>MANAGER U.S. FISH AND WILDLIFE SERVICE 2800 COTTAGE WAY RM W-2606 SACRAMENTO, CA 95825</p>

<p>HONORABLE JERRY LEWIS U.S. HOUSE OF REPRESENTATIVES WASHINGTON, DC 20515</p>	<p>SENATOR BARBARA BOXER U.S. SENATE 112 HART SENATE OFFICE BLDG WASHINGTON, DC 20510</p>
<p>FRIENDS OF THE RIVER C/O AMY BRICKER SHUTE, MIHALY & WEINBERGER 396 HAYES ST. SAN FRANCISCO, CA 94102</p>	

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 field 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 SOUTH SWP PROJECT PROCESS PLAN AND SCHEDULE

Shaded milestones are unnecessary if there are no study disputes. If the due date falls on a weekend or holiday, the due date is the following business day. Early filings or issuances will not result in changes to these deadlines.

Sub-section(s)	Lead	Activity ^a	Time Frame (Start and Finish) ^{b, c}	
18 CFR § 5.5 NOTIFICATION OF INTENT				
(a)-(g)	Licensees	File NOI and request for non-federal representative status under § 7 of the ESA and § 106 of the NHPA (<i>No earlier than 5.5 years and no later than 5 years prior to expiration of the current license</i>)	8/1/16 (Monday)	
18 CFR § 5.6 PRE-APPLICATION DOCUMENT				
(a)-(e)	Licensees	File PAD (<i>No earlier than 5.5 years and no later than 5 years prior to expiration of the current license</i>)	8/1/16 (Monday)	
18 CFR § 5.7 TRIBAL CONSULTATION				
--	FERC	Hold meeting with each Indian tribe likely to be affected by the potential license application	8/2/16 (Tuesday)	8/31/16 (Wednesday)
18 CFR § 5.8 CONSULTATION COMMENCES				
(a)	FERC	Issue Notice of NCP (<i>No later than 60 days from date NOI and PAD filed</i>)	8/2/16 (Tuesday)	9/30/16 (Friday)
(b)	FERC	Initiate informal consultation under § 7 of the ESA and/or § 106 of the NHPA, if appropriate (<i>No later than 60 days from date NOI and PAD filed</i>)	8/2/16 (Tuesday)	9/30/16 (Friday)
18 CFR § 5.8. ISSUE SCOPING DOCUMENT 1				
(c)	FERC	SD1 (<i>No later than 60 days from date NOI and PAD filed</i>)	8/2/16 (Tuesday)	9/30/16 (Friday)

Sub-section(s)	Lead	Activity ^a	Time Frame (Start and Finish) ^{b, c}	
18 CFR § 5.8. HOLD NEPA SCOPING MEETING AND SITE VISIT				
(e)	FERC	Post notice of NEPA scoping meeting in Federal Register and local newspapers (<i>No later than 30 days from date NCP issued</i>)	8/2/16 (Tuesday)	9/30/16 (Friday)
(e)	FERC	Notify relicensing participants by mail of scoping meeting (<i>No later than 30 days from date NCP issued</i>)	8/2/16 (Tuesday)	9/30/16 (Friday)
(d)	FERC	Hold NEPA scoping meeting and conduct site visit (<i>No later than 30 days from date NCP issued</i>)	10/1/16 (Saturday)	10/31/16 (Monday)
(d)	Relicensing Participants	Relicensing participants may attend the meeting to identify issues for NEPA scoping and preliminary study needs, and discuss process plan and schedule (<i>No earlier than 30 days but no later than 60 days from date NCP issued</i>)	10/1/16 (Saturday)	10/31/16 (Monday)
18 CFR § 5.9. COMMENTS AND INFORMATION OR STUDY REQUESTS				
(a)	Licensees & Relicensing Participants	File comments on SD1 (<i>No later than 60 days from date NCP issued</i>)	10/1/16 (Saturday)	11/29/16 (Tuesday)
(a)	FERC & Relicensing Participants	File comments on the PAD and requested studies (<i>No later than 60 days from date NCP issued</i>)	10/1/16 (Saturday)	11/29/16 (Tuesday)
18 CFR § 5.10 SCOPING DOCUMENT 2				
--	FERC	SD2 (<i>No later than 45 days from end of PAD and SD1 comment period</i>)	11/30/16 (Wednesday)	1/13/17 (Friday)
18 CFR § 5.11 APPLICANT'S PROPOSED STUDY PLAN AND STUDY PLAN MEETINGS				
(a)	Licensees	File Proposed Study Plan (<i>No later than 45 days from end of PAD and SD1 comment period</i>)	11/30/16 (Wednesday)	1/13/17 (Friday)
(e)	Licensees	Hold Proposed Study Plan meeting (<i>No later than 30 days after date Proposed Study Plan filed</i>)	1/14/17 (Saturday)	2/13/17 (Monday)

Sub-section(s)	Lead	Activity^a	Time Frame (Start and Finish)^{b, c}	
18 CFR § 5.12 COMMENTS ON PROPOSED STUDY PLAN				
--	Relicensing Participants	File comments on Proposed Study Plan (<i>No later than 90 days after date Proposed Study Plan is filed</i>)	1/14/17 (Saturday)	4/13/17 (Thursday)
18 CFR § 5.13 REVISED STUDY PLAN AND STUDY PLAN DETERMINATION				
(a)	Licensees	File Revised Study Plan (<i>No later than 30 days from date Proposed Study Plan comment period ends</i>)	4/14/17 (Friday)	5/15/17 (Monday)
(b)	Relicensing Participants	File comments on Revised Study Plan (<i>No later than 15 days from date Revised Study Plan is filed</i>)	5/18/17 (Thursday)	5/30/17 (Tuesday)
(c)	FERC	Issue Study Plan Determination (<i>No later than 30 days from date Revised Study Plan is filed</i>)	5/18/17 (Thursday)	6/14/17 (Wednesday)
(d)	FERC	Revised Study Plan deemed approved (<i>20th day after FERC Determination, if no study plan disputes filed</i>)	7/5/17 (Wednesday)	
18 CFR § 5.14 FORMAL STUDY DISPUTE RESOLUTION PROCESS				
(a)	Agencies and Tribes with Mandatory Conditioning Authority under FPA 4(e) and 18 and CWA 401	File NOD (<i>No later than 20 days of date FERC Determination issued</i>)	6/14/17 (Wednesday)	7/5/17 (Wednesday)
(d)	FERC	Convene Dispute Resolution Panel (<i>No later than 20 days from date NOD filed</i>)	7/6/17 (Thursday)	7/25/17 (Tuesday)
(i)	Licensees & Relicensing Participants	File comments on NOD (<i>No later than 25 days from date NOD filed</i>)	7/6/17 (Thursday)	7/31/17 (Monday)

Sub-section(s)	Lead	Activity^a	Time Frame (Start and Finish)^{b, c}	
(k)	Dispute Resolution Panel (DRP)	Deliver to FERC finding on NOD (<i>No later than 50 days from date NOD filed</i>)	7/6/17 (Thursday)	8/24/17 (Thursday)
(l)	FERC	Director of Office of Energy Projects issues written determination regarding NOD (<i>No later than 70 days from date NOD filed</i>)	7/6/17 (Thursday)	9/13/17 (Wednesday)
18 CFR § 5.15 CONDUCT STUDIES				
(a)	Licensees	Conduct studies	6/15/17 (Thursday)	1/31/20 (Friday)
(b)	Licensees	File periodic progress reports	FERC determines frequency	
(c)(1)	Licensees	File Initial Study Report (<i>No later than 1 year after FERC's approval of Revised Study Plan</i>)	6/15/17 (Thursday)	6/14/18 (Thursday)
(c)(2)	Licensees	Hold Initial Study Report meeting (<i>No later than 15 days of date Initial Study Report filed</i>)	6/15/18 (Friday)	6/29/18 (Friday)
(c)(3)	Licensees	File Initial Study Report meeting summary, including proposed plan modifications and new studies (<i>No later than 15 days after Initial Study Report meeting</i>)	6/30/18 (Saturday)	7/16/18 (Monday)
(c)(7)	FERC	Approve meeting summary and study plan modifications, if no disagreements filed (<i>30th day after meeting summary filed</i>)	8/15/18 (Wednesday)	
(c)(4)	Relicensing Participants	File disagreements with meeting summary, including Licensees' proposed study plan modifications and new studies (<i>No later than 30 days after Initial Study Report meeting summary filed</i>)	7/17/18 (Tuesday)	8/15/18 (Wednesday)
(c)(5)	Licensees & Relicensing Participants	File responses to disagreements (<i>No later than 30 days after disagreement period ends</i>)	8/16/18 (Thursday)	9/14/18 (Friday)

Sub-section(s)	Lead	Activity ^a	Time Frame (Start and Finish) ^{b, c}	
(c)(6)	FERC	Resolve disagreements and amend study plan (<i>No later than 30 days after responses to disagreements period ends</i>)	9/15/18 (Saturday)	10/15/18 (Monday)
(f)	Licensees	File Updated Study Report, including election of the Licensees to file a DLA rather than a PLP, if Licensees chose to do so	6/15/18 (Friday)	6/14/19 (Friday)
(c)(2)	Licensees	Hold Updated Study Report meeting (<i>No later than 15 days from date Updated Study Report filed</i>)	6/15/19 (Saturday)	7/1/19 (Monday)
(c)(3)	Licensees	File Updated Study Report meeting summary, including the Licensees' proposed study plan modifications and new studies (<i>No later than 15 days after Updated Study Report meeting</i>)	7/2/19 (Tuesday)	7/16/19 (Tuesday)
(c)(7)	FERC	Approve meeting summary and study plan modifications, if no disagreements filed (<i>No later than 30 days after meeting summary filed</i>)	8/15/19 (Thursday)	
(c)(4)	Relicensing Participants	File disagreements with meeting summary, proposed study modifications, and new studies (<i>No later than 30 days after Updated Study Report meeting summary filed</i>)	7/17/19 (Wednesday)	8/15/19 (Thursday)
(c)(5)	Licensees & Relicensing Participants	File response to disagreements (<i>No later than 30 days after disagreement period ends</i>)	8/16/19 (Friday)	9/16/19 (Monday)
(c)(6)	FERC	Resolve disagreement and amend study plan (<i>No later than 30 days after response to disagreements period ends</i>)	9/17/19 (Tuesday)	10/16/19 (Wednesday)

Sub-section(s)	Lead	Activity ^a	Time Frame (Start and Finish) ^{b, c}	
18 CFR § 5.16 PRELIMINARY LICENSING PROPOSAL OR DRAFT LICENSE APPLICATION				
(a)–(d)	Licensees	File PLP or DLA (<i>No less than 150 days prior to deadline for filing license application</i>) ^d	9/3/19 (Tuesday)	
(e)	Relicensing Participants	File comments on PLP/DLA (<i>No later than 90 days from date PLP or DLA filed</i>)	9/4/19 (Wednesday)	12/2/19 (Monday)
(a)	Licensees	File an FLA (<i>No later than 2 years prior to expiration of the current license</i>)	1/31/20 (Friday)	

^a The activity description is a good faith effort to summarize the pertinent regulation. The reader is encouraged to read the specific regulation.

^b When an activity is contingent on completion of a previous activity, the schedule assumes the previous activity is completed the latest date possible for that previous activity, unless otherwise indicated.

^c According to 18 CFR § 385.2007(a)(2), if a filing date falls on a Saturday, Sunday, or federal legal public holiday, the deadline for filing becomes the next business day. The schedule includes this consideration.

^d This ILP schedule assumes that studies begin when FERC issues its Study Determination and may continue for two years or more.

Document Content(s)

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