

FEDERAL ENERGY REGULATORY COMMISSION

Washington, DC 20426

May 18, 2017

OFFICE OF ENERGY PROJECTS

Project No. 298-080 – California
Kaweah Hydroelectric Project
Southern California Edison Company

Subject: Scoping Document 2 for the Kaweah Hydroelectric Project

To the Party Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing the Pre-Application Document submitted by the Southern California Edison Company (SCE) for relicensing the Kaweah Hydroelectric Project (FERC No. 298). The proposed project is located on the Kaweah River and East Fork Kaweah River in Tulare County, California.

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.

Our preliminary review of the environmental issues to be addressed in our EA was contained in Scoping Document 1 (SD1), which was issued on February 10, 2017. We requested comments on SD1 and held scoping meetings on March 14, 2017, to hear the views of all interested entities on the scope of issues to be included in the EA. We revised SD1 based on the oral comments we received at the scoping meetings and written comments we received throughout the scoping process. The enclosed Scoping Document 2 (SD2) describes the proposed action and alternatives, the environmental analysis process we will follow to prepare the EA, and a revised list of issues to be addressed in the EA.

We appreciate the participation of governmental agencies, non-governmental organizations, and the general public in the scoping process. Key changes from SD1 to SD2 are identified in bold, italicized type. SD2 is being distributed to all entities on the Commission's mailing list for this project. SD2 can also be accessed online at: <http://www.ferc.gov/docs-filing/elibrary>.

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The enclosed SD2 supersedes the February 10, 2017, SD1. SD2 is issued for informational use by all interested entities; no response is required. Please direct any questions about the scoping process to Jim Hastreiter at (503) 552-2760 or james.hastreiter@ferc.gov. Additional information about the Commission's licensing process and the Kaweah Project may be obtained from our website, www.ferc.gov.

Enclosure: Scoping Document 2

cc: Mailing List
Public Files

SCOPING DOCUMENT 2
KAWEAH HYDROELECTRIC PROJECT

CALIFORNIA

PROJECT NO. 298-080

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

May 2017

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SCOPING DOCUMENT 1

Kaweah Hydroelectric Project, No. 298-080

1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),¹ may issue licenses for terms ranging from 30 to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On December 14, 2016, the Southern California Edison Company (SCE or applicant) filed a Pre-Application Document (PAD) and Notice of Intent to seek a new license for the Kaweah Project (FERC Project No. 298).²

The Kaweah Project (project) is located on the Kaweah River and East Fork Kaweah River in Tulare County, California (figure 1). The 8.85 megawatt (MW) project consists of three developments: Kaweah No.1, Kaweah No. 2 and Kaweah No. 3. The average annual generation of the Kaweah Project from 2010 to 2014 was **28,500** megawatt-hours (MWh). Portions of the project occupy public lands administered by the Bureau of Land Management. The project incorporates several non-project facilities (diversion and water conveyance structures) located within Sequoia National Park, which are operated under a special use permit issued to SCE by the National Park Service. Section 3.0 provides a detailed description of the project.

The National Environmental Policy Act (NEPA) of 1969,³ the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of relicensing the Kaweah 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

¹ 16 U.S.C. § 791(a)-825(r) (2012).

² The current license for the Kaweah Project was issued with an effective date of January 31, 1992, for a term of 30 years and expires on December 31, 2021.

³ National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370(f) (2012).

the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

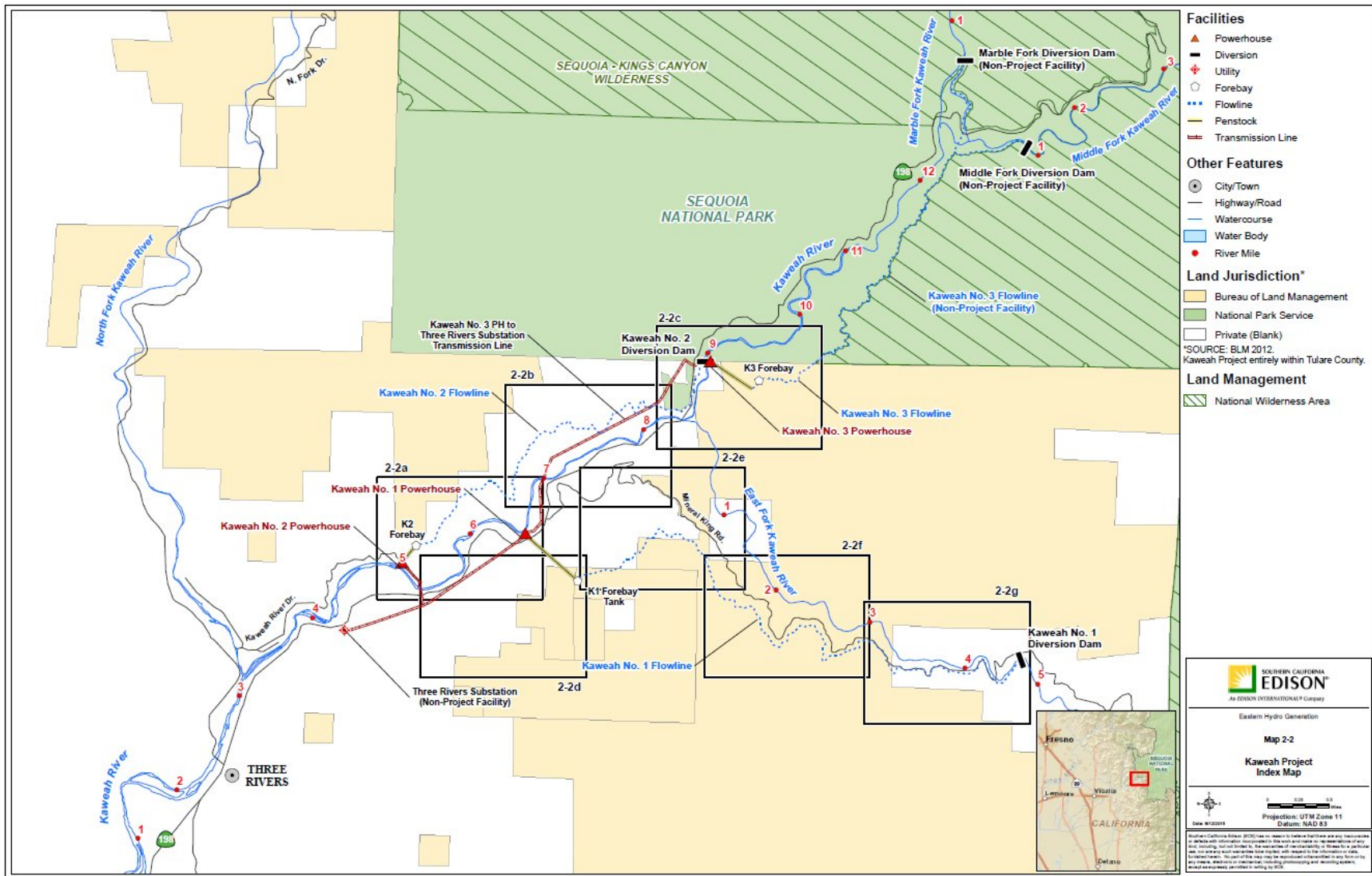


Figure 1. Location of the project (Source: SCE, 2016).

2.0 SCOPING

This Scoping Document 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

Commission staff issued SD1 on February 10, 2017. On March 14, 2017, staff conducted morning and evening scoping meetings in Visalia, California. Public notice of the meetings was published in the Federal Register and a local newspaper. A court reporter recorded and transcribed both of the scoping meetings. On March 15, 2017, staff conducted an environmental site review.

In addition to the oral comments received during the scoping meetings, written comments were received from the following agencies and entities:

<u>Commenting Entity</u>	<u>Filing Date</u>
Southern California Edison Company	April 4, 2017
American Whitewater	April 13, 2017
California Department of Water Resources	April 13, 2017
Bureau of Land Management	April 13, 2017
National Park Service	April 14, 2017

Key changes from SD1 are identified in ***bold, italic type***. Note that the primary purpose of SD2 is to identify issues to be analyzed in the EA, not to identify all recommended and/or potential protection, mitigation, and enhancement (PM&E) measures. All proposed and recommended PM&E measures will be analyzed in the EA.

2.2.1 Issues Raised During Scoping

General Comments

Comment: SCE states that the term “co-applicant” is used several times in SD1 and should be changed to “applicant.”

Response: We have revised the scoping document accordingly.

Comment: SCE states that the 28.5 megawatt-hours average annual project generation in the “Introduction” section should be changed to 28,500 megawatt-hours.

Response: We have revised the scoping document accordingly.

Existing Project Facilities

Comment: SCE states that the Kaweah No. 2 development dam is on the Kaweah River, not on the Middle Fork Kaweah River.

Response: We have revised the scoping document accordingly.

Comment: BLM states that none of the exclusionary fencing at the Kaweah Project developments has been described or listed in the Pre-Application Document and that the project exclusionary fencing on BLM land and private lands of the Washburn Cove grazing allotment along Kaweah No. 2 flowline has not been maintained by SCE. BLM also states that project-induced recreation by the public with access to Kaweah No. 2 flowline is causing further damage to the project exclusionary fencing, especially at wildlife bridges, and that damage or disrepair of exclusionary fencing on the north side of Kaweah No. 2 flowline causes livestock mortality and renders the public and private

lands of the Washburn Cove grazing allotment unusable for that purpose.

Response: We have revised the scoping document to include the effects of potential project facilities such as exclusionary fencing on land-use activities.

Existing Project Operations

Comment: SCE comments that a portion of the water at Kaweah No. 1 and Kaweah No. 2 is used to meet downstream contractual water delivery obligations, and should be clarified that Kaweah No. 3 is not involved in those obligations.

Response: We have revised the scoping document to clarify Kaweah No. 3 is not used to meet downstream contractual water delivery obligations.

Proposed Project Facilities and Operations

Comment: SCE requests that the description of the proposed modification to existing license Article 405 be changed to read “SCE proposes to modify article 405 to eliminate the need for future modification requests to resource agencies.”

Response: We have revised the description of SCE’s proposed modification to existing license Article 405 as requested.

Cumulative Effects Geographic Scope

Comment: SCE requests that the description of the cumulative effects geographic scope be changed from “to the Tule River” to “to the Army Corps of Engineers Terminus Dam where water is released for irrigation purposes” because the Kaweah River becomes dewatered below Terminus dam before reaching Tule Lake.

Response: We have modified the description of the cumulative effects geographic scope accordingly.

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 *applicants*’ proposed action, and (3) alternatives to the proposed action.

3.1 NO-ACTION ALTERNATIVE

Under the no-action alternative, the Kaweah 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

The Kaweah Project has three developments consisting of the following components.

Kaweah No. 1

This development consists of: (1) a 20-foot-long and 6-foot-high concrete diversion dam on the East Fork Kaweah River, (2) a 30,723-foot-long steel flume, (3) a forebay tank, (4) a 3,340-foot-long penstock, and (4) a powerhouse with an impulse turbine rated at 2.25 megawatts (MW).

Kaweah No. 2

This development consists of: consists of: (1) a 161-foot-long and 7-foot-high masonry diversion dam on the *Kaweah River*, (2) a 16,738-foot-long concrete-lined ditch, (3) a 3,822-foot-long steel flume, (4) a 1,047-foot-long steel pipe, (5) a forebay, (6) a 1,012-foot-long buried penstock, and (7) a powerhouse with a Francis turbine rated at 1.8 MW.

Kaweah No. 3

This development consists of: consists of: (1) a 2,580 foot-long concrete-lined flume, (2) an embankment forebay, (3) a 3,151 foot-long penstock, and (4) a powerhouse with two impulse turbines rated at a combined 4.8 MW.

The project has a primary 4.09-mile-long transmission line extending from the Kaweah No. 3 powerhouse to a substation, and two tap lines (120-foot-long and 0.4-mile-long) connecting Kaweah No. 1 and No. 2 powerhouses, respectively, to the primary line, and appurtenant facilities.

Non-project Facilities

The project makes use of several non-project facilities located in Sequoia National Park. These facilities comprise portions of Kaweah No. 1 and No. 3 developments: (1) two diversion structures on the Middle Fork and Marble Fork Kaweah Rivers, (2) a 21,000-foot-long steel flume that is the initial section of flowline which conveys water to the Kaweah No. 3 powerhouse, and (3) four small reservoirs on the East Fork Kaweah River. These facilities are operated under a special use permit (Permit No. PWR-SEKI-

6000-2016-015) issued to SCE by the National Park Service, which expires on September 8, 2026.

3.1.2 Existing Project Operations

The project developments operate independently of one another and in a run-of-river mode. Water captured by the diversion structures is transported through connecting conveyance facilities and penstocks to the powerhouses for power generation and then returned to the river at the tailraces. *A portion of the water in Kaweah No. 1 and No. 2 flowlines is used* to meet downstream contractual obligations for water delivery with pre-1914 water users.

The project forebays and diversion pools have minimal water storage capability of about 13 acre-feet (AF). The four small non-project reservoirs located on tributaries to the East Fork Kaweah River upstream of the Kaweah No. 1 diversion dam and within the Sequoia National Park store a maximum of 1,153 AF of water, which is used to generate power at the Kaweah No. 1 powerhouse.

The project diversions create two bypassed river reaches. The Kaweah No. 1 development bypasses streamflow around 4.7 miles of the East Fork Kaweah River from the diversion dam to the confluence with the Kaweah River. The Kaweah No. 2 development bypasses streamflow around 4.1 miles of the Kaweah River from the diversion dam to the Kaweah No. 2 powerhouse tailrace.

The volume and timing of streamflow diverted is a function of inflow, minimum flow and ramping rate requirements of the existing license, and the flow required to maintain sufficient head in the water conveyance facilities (flowlines) to meet downstream water delivery contractual obligations. The Kaweah No.1 development flowline has a maximum hydraulic capacity of 24 cubic feet per second (cfs), the Kaweah No. 2 development flowline has a maximum hydraulic capacity of 87 cfs, and the Kaweah No. 3 development flowline has a maximum hydraulic capacity of 97 cfs. To maintain sufficient head pressure to meet downstream water deliveries, SCE must maintain at least 1 cfs flow through the Kaweah No. 1 development and 3 cfs through the Kaweah No. 2 development.

3.2 APPLICANTS' PROPOSAL

3.2.1 Proposed Project Facilities and Operations

SCE proposes to continue to operate and maintain the Kaweah Project as required by its existing license. SCE does not propose any new development at this time. However, SCE is proposing to modify the existing project boundary to encompass all facilities necessary for operation and maintenance of the project, while removing lands

that are not related to project functions. SCE proposes to include the existing Kaweah No. 1 forebay access road as a project facility.

SCE proposes to remove part of the ramping rate requirement when increasing flows below the Kaweah No. 1 and No. 2 diversion dams. The ramping rate in the existing license requires increasing and decreasing flows below Kaweah No. 1 and No. 2 powerhouses to not be altered at a rate greater than 30 percent of the existing stream flow per hour.

SCE also proposes to modify license article 405 to eliminate *the need for future modification* requests to resource agencies. Historically, SCE has requested approval from California Department of Fish and Wildlife and U.S. Fish and Wildlife Service (FWS) to temporarily reduce minimum flow releases below Kaweah No. 1 diversion and Kaweah No. 2 diversion when projected inflows were approaching the combined flow necessary to meet both water supply and minimum flow release requirements. These flow modifications were necessary to ensure compliance with required minimum flows based on uncertainty in actual runoff and inflow.

SCE further proposes to remove required protective measures for the elderberry shrub, the host plant for the federally threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). In 2014, the FWS determined that Tulare County was no longer considered within the valley elderberry longhorn beetle's range.

3.2.2 Proposed Environmental Measures

SCE proposes the following environmental measures:

Geology and Soil Resources

- Continue to implement the requirements of Article 401 of the current license for measures in the Erosion Control Plan.
- Continue to implement the requirements of Article 402 of the current license for erosion control monitoring.
- Define and implement methods for sediment management at the Kaweah No. 2 diversion pool, including sediment removal, disposal, and monitoring for protection of environmental resources.

Aquatic Resources

- Continue to implement the requirements of Article 404 of the current license for protecting aquatic resources.

- Continue to implement the requirements of Article 405 of the current license by releasing minimum flows from Kaweah No. 1 diversion and Kaweah No. 2 diversion for protecting aquatic resources.
- Continue to ensure the automatic releases of minimum flows required by Article **405** of the current license.
- Continue to operate and maintain streamflow gages in the East Fork Kaweah River and mainstem Kaweah River.

Terrestrial Resources

- Continue to implement the Wildlife Mortality Monitoring Plan required by Article 410 of the current license, which includes weekly monitoring of Kaweah No. 2 and No. 3 flowlines to determine the success of wildlife protection measures (e.g. wildlife bridges) included in the Wildlife Protection Plan; inspecting wildlife protection facilities to determine any required maintenance or upgrade actions; and filing an annual report with the Commission that documents mortality and observed wildlife use on or near the bridges.
- Continue to implement the Transmission Line Avian Monitoring required by Article 412 of the current license, which includes monitoring for injury or electrocution of raptors and other birds along project transmission lines and filing a report with the Commission every five years documenting the monitoring results.

Threatened and Endangered Species

- None proposed. The potential need for threatened and endangered species resource measures will be evaluated during the licensing process.

Recreation, Land Use, and Aesthetics

- Continue to implement requirements of Article 203 of the current license to ensure all lands along open flow lines remain clear to an adequate width and dispose of all temporary structures.

Cultural Resources

- Update SCE's existing cultural resources management plan including: (1) incorporating information about new historic properties that are identified within the FERC project boundary, (2) identify measures to avoid adverse

effects to these historic properties, (3) modify existing measures, as needed, and (4) identify any new monitoring and/or consultation requirements.

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 *applicant* 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 Kaweah 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 Kaweah 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 Kaweah Project in combination with other hydroelectric projects and other activities in the Kaweah 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 Kaweah River Basin. We have identified the geographic scope for water quality and fisheries to include the East Fork Kaweah River from the Kaweah No. 1 diversion dam and the Kaweah River from Kaweah No. 2 diversion dam to the *Army Corps of Engineers Terminus Dam where water is released for irrigation purposes*. We chose this geographic scope because the operation and maintenance of the Kaweah Project, in combination with other water development activities in these drainages may cumulatively affect water quality and fisheries 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 Kaweah 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

- Effects of continued project operation on shoreline erosion and sedimentation in project waters.

4.2.2 Aquatic Resources

- Effects of continued project operation on dissolved oxygen and water temperature in the East Fork Kaweah River and the Kaweah River.*
- Effects of continued project operation on streamflows, aquatic habitat, and fish resources* in the East Fork Kaweah River and the Kaweah River.
- Effects of fish entrainment at the Kaweah No. 1 and No. 2 diversion dams on fish resources.*

4.2.3 Terrestrial Resources

- Effects of continued project operation on riparian and wetland habitat and associated wildlife, including waterfowl, wetland-dependent birds, and aquatic reptiles and amphibians.
- 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 plant and animal species that have the potential to occur in the project area including: California jewelflower (*Caulanthus californicus*), Springville clarkia (*Clarkia*

springvillensis), kern mallow (*Eremalche kernensis*), Keck's checker-mallow (*Sidalcea keckii*), fisher (*Pekania pennanti*), blunt-nosed leopard lizard (*Gambelia sila*), California condor (*Gymnogyps californianus*), and southwestern willow flycatcher (*Empidonax traillii extimus*).

4.2.5 Recreation, Land Use, and Aesthetics

- Effects of project operation and maintenance on recreational access, use, and *exclusionary fencing* in the project area.
- Adequacy of existing recreational access and facilities to meet current and future recreation demand.
- *Effects of project operation and maintenance on recreational whitewater boating use, on the Kaweah and East Fork Kaweah Rivers, within the project area.*
- Effects of project operation and maintenance on aesthetic quality of the project area.

4.2.6 Cultural Resources

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

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 *applicants* and the recommendations of the consulted entities, the *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 SCE's initial study proposals by resource area; the PAD contains detailed information on the *applicants'* initial study proposals. Further studies may need to be added to this list based on comments provided to the Commission and the *applicants* from interested participants, including Indian tribes.

Table 1. SCE's initial study proposals for the Kaweah Project. (Source: Kaweah Project PAD).

Resource Area	Proposed Study
Aquatic Resources	
	Instream Flow Study to characterize aquatic and riparian habitat as a function of streamflow.
	Fish Population Study to document and characterize in the project bypassed reaches fish species composition, distribution, abundance, fish growth, condition factor, and population age structure.
	Macroinvertebrate Technical Study to document in the bypassed reaches the benthic macroinvertebrate community, the density and size distribution of drifting macroinvertebrates, and to characterize general habitat conditions.
	Water Temperature Study to characterize the relationship between flow and water temperature in bypass river, document the availability of cold water temperature refugia in bypass river reaches, and assess the potential effects of increased air temperature due to global warming on water temperatures over the term a new license.
	Geomorphology Study to document sediment conditions in the bypass river reaches, characterize sediment capture in diversion pools, develop information to assist in the identification of flows necessary to maintain geomorphic processes in the bypass river reaches, and identify sources of sediment (major gullies, areas of vegetation and soil loss, and hillslope destabilization and erosion), including documentation of erosion resulting from spills from project forebays and historic flume failures.
	Water Quality Study to characterize physical, chemical, and bacterial water quality conditions in the bypass river reaches and comparison

Resource Area	Proposed Study
	reaches, and compare to the Water Quality Control Plan for the Tulare Lake Basin (CVRWQCB 2004) objectives and water quality standards.
	Special-status Amphibians and Aquatic Reptiles Study to identify and map in the project area potential habitat for foothill yellow-legged frog (FYLF), document the distribution and abundance of FYLF populations, document the timing and length of FYLF breeding season, if FYLF are present, characterize the water stage, velocity, and temperature of various flow regimes as it relates to FYLF habitat through coordination with the instream flow and water temperature studies, document the presence of western pond turtle (WPT) during FYLF surveys, and document the presence of potential WPT nesting habitat.
	Fish Passage Study to document the location, nature, and characteristics of fish barriers in bypass river reaches, and identify project facilities and operations (e.g., diversion structures, instream flow releases) that may affect fish passage.
	Entrainment Study to characterize diversions, flowlines, powerhouse turbines, and operations in relation to factors that may affect entrainment or mortality, directly estimate the potential for entrainment and mortality by sampling fish entrainment in the project flowlines, and develop the information necessary to assess the potential fish population/production effects of entrainment.
Terrestrial Resources	
	Botanical Study to document vegetation alliances and wildlife habitats adjacent to project facilities, document riparian vegetation alliances along bypass reaches and diversion pools and forebays, document special-status plant and moss populations at Project facilities, and document non-native invasive plants at project facilities.
	Wildlife Study to identify special-status wildlife species potentially occurring in California Wildlife Habitat Relationships habitats documented as part of the Botanical Resources Study, determine whether project transmission line, transmission tap line, and power line configurations are consistent with guidelines for the avoidance of avian mortalities, document use of project facilities by special-status bats during reproduction or other seasonal use, evaluate the use of wildlife bridges and escape ramps by mule deer and other animals, including livestock, and document mortality of wildlife/livestock in project flowlines.

Resource Area	Proposed Study
Recreation, Land Use, and Aesthetics	
	<p>Transportation Study to inventory and assess condition of project roads and trails, characterize SCE's use of project roads and trails, including season of use and level of use, characterize SCE's current maintenance practices and responsibilities, identify existing agreements related to project roads and trails (e.g., maintenance agreements, easements, rights of way, special use permits), and identify the location, condition, use, and maintenance of helicopter landing sites utilized for routine operation and maintenance of the project.</p>
	<p>Visual and Noise Study to identify and map visual resources in the vicinity of the Kaweah Project, including visual management objectives established by the BLM, Tulare County, and/or the NPS, document the existing visual condition of project facilities from key observation points established in consultation with the BLM, Tulare County, and/or the NPS, as appropriate, determine whether the project facilities meet established BLM, Tulare County, and/or NPS visual resource management objectives and assess compatibility of project facilities with surrounding landscape, assess helicopter noise associated with routine operation and maintenance of the project, and assess visual condition and noise associated with spills from the Kaweah No. 3 forebay</p>
	<p>Recreation Study to identify, map, and describe all developed recreation facilities (public and private) in the vicinity of the Kaweah Project, including capacity and ownership, identify, map and describe any existing project-related recreation facilities/area (i.e., "Edison Beach"), including capacity, condition, user conflicts, consistency with applicable accessibility requirements, and operation and maintenance responsibilities, characterize recreation use and opportunities in the immediate vicinity of the project facilities and in the bypass reaches, including along the Kaweah No. 2 flowline, document recreation needs identified in current relevant State or local recreation plans and determine whether those needs can be accommodated by existing recreation facilities, characterize commercial and private whitewater boating use in the bypass reaches, identify the range of flows in the bypass reaches that accommodate whitewater boating, identify existing mechanisms for disseminating flow information to the public, and document potential safety issues and existing features or measures that are implemented to protect the public.</p>

Resource Area	Proposed Study
Cultural Resources	
	Cultural Study to identify all known and currently undiscovered cultural resources that could potentially be affected by project operations and maintenance activities, and to evaluate newly discovered cultural resources to determine if they are eligible for listing in the National Register of Historic Places.

6.0 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 Kaweah 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	March 2017
Applicant files Final License Application	December 2019
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 *applicants'* filing of the final license application. A copy of the *applicants'* process plan and schedule, which has a complete list of pre-filing relicensing milestones for the Kaweah Project, including those for developing the license application, is attached as appendix B to this SD2.

7.0 PROPOSED EA OUTLINE

The preliminary outline for the Kaweah Project EA is as follows:

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8.0 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 Kaweah 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 Kaweah 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. **2016**. Water Quality Control Plan for the Tulare Lake Basin Second Edition. Sacramento, California. **July 2016**.

Department of the Army, Corps of Engineers. Sacramento District. 1996. Kaweah River Basin Investigation: Final Feasibility Report and Final Environmental Impact Statement. Sacramento, California. September 1996.

Forest Service. 1988. Sequoia National Forest Land and Management Plan. Department of Agriculture, Porterville, California. March 1988.

Forest Service. 2004. Sierra Nevada National Forest Land and Resource Management Plan, Amendment. Department of Agriculture, Vallejo, California. January 2004.

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

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.

9.0 MAILING LIST

The list below is the Commission's official mailing list for the Kaweah Project (FERC No. 298). If you want to receive future mailings for the Kaweah 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: Kaweah Project No. 298-080. 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 Kaweah Project

<p>JIM CANADAY SENIOR ENVIRONMENTAL SCIENTIST CALIFORNIA DEPARTMENT OF WATER RESOURCES 1001 I ST SACRAMENTO, CA 95814</p>	<p>CATHY CROTHERS OFFICE OF THE CHIEF COUNSEL CALIFORNIA DEPARTMENT OF WATER RESOURCES PO BOX 942836 SACRAMENTO,CALIFORNIA 94236-0001</p>
<p>RUSS J KANZ CALIFORNIA DIVISION OF WATER RIGHTS PO BOX 100 SACRAMENTO,CALIFORNIA 95812- 0100</p>	<p>COMMANDER U.S. ARMY CORPS OF ENGINEERS SAN FRANCISCO DISTRICT OFFICE 1455 MARKET ST, #1760 SAN FRANCISCO, CALIFORNIA 94103</p>
<p>CALIFORNIA PUBLIC UTILITIES COMMISSION CHAIRMAN 505 VAN NESS AVE SAN FRANCISCO, CA 94102-3214</p>	<p>SHER BEARD SOUTHERN CALIFORNIA EDISON COMPANY 54170 MOUNTAIN SPRUCE BIG CREEK, CALIFORNIA 93605</p>

<p>KELLY HENDERSON ATTORNEY SOUTHERN CALIFORNIA EDISON COMPANY PO BOX 800 ROSEMEAD, CALIFORNIA 91770- 0800</p>	<p>MARTIN OSTENDORF COMPLIANCE MANAGER SOUTHERN CALIFORNIA EDISON COMPANY 54170 MTN. SPRUCE ROAD P.O. Box 100 BIG REEK, CALIFORNIA 93605</p>
<p>WAYNE P ALLEN RELICENSING MANAGER SOUTHERN CALIFORNIA EDISON COMPANY PO BOX 100 BIG REEK,CALIFORNIA 93605-0100</p>	<p>FERC CASE ADMINISTRATION SOUTHERN CALIFORNIA EDISON COMPANY 2244 WALNUT GROVE AVE. ROSEMEAD, CALIFORNIA 91770</p>
<p>NICOLAS VON GERSDORFF DAM SAFETY ENGINEER SOUTHERN CALIFORNIA EDISON COMPANY 1515 WALNUT GROVE AVE ROSEMEAD, CALIFORNIA 91770</p>	<p>KAMALA D. HARRIS SENATOR U.S. SENATE 112 HART SENATE OFFICE BLDG WASHINGTON, DISTRICT OF COLUMBIA 20510</p>
<p><i>CHRISTINA CASTELLON BUREAU OF LAND MANAGEMENT BAKERSFIELD FIELD OFFICE 3801 PEGASUS DRIVE BAKERSFIELD, CA 93308</i></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
KAWEAH 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.

Responsible Party	Pre-Filing Milestone^a	Date^{b, c}	FERC Regulation
Applicant	Issue Public Notice for NOI/PAD	12/14/16	5.3(d)(2)
Applicant	File NOI/PAD with FERC	12/14/16	5.5, 5.6
FERC	Issue Notice of Commencement of Proceeding; Issue Scoping Document 1	2/12/17	5.8
FERC	Kaweah Project Scoping Meetings and Environmental Site Review	3/14/17 3/15/17	5.8(b)(viii)
All stakeholders	PAD/SD1 Comments and Study Requests Due	4/13/17	5.9
FERC	Issue Scoping Document 2	5/28/17	5.1
Applicant	File Proposed Study Plan (PSP)	5/28/17	5.11(a)
All stakeholders	Proposed Study Plan Meeting	6/27/17	5.11(e)
All stakeholders	Proposed Study Plan Comments Due	8/26/17	5.12
Applicant	File Revised Study Plan	9/25/17	5.13(a)
All stakeholders	Revised Study Plan Comments Due	10/10/17	5.13(b)
FERC	Director's Study Plan Determination	10/25/17	5.13(c)
FS, FWS, Ecology	Any Study Disputes Due	11/14/17	5.14(a)
Dispute Panel	Third Dispute Panel Member Selected	11/29/17	5.14(d)
Dispute Panel	Dispute Resolution Panel Convenes	12/4/18	5.14(d)(3)
Applicant	Applicant Comments on Study Disputes Due	12/9/17	5.14(j)
Dispute Panel	Dispute Resolution Panel Technical Conference	12/14/17	5.14(j)

Responsible Party	Pre-Filing Milestone^a	Date^{b, c}	FERC Regulation
Dispute Panel	Dispute Resolution Panel Findings Issued	1/3/18	5.14(k)
FERC	Director's Study Dispute Determination	1/23/18	5.14(l)
Applicant	First Study Season	2018	5.15(a)
Applicant	Initial Study Report	10/25/18	5.15(c)(1)
All stakeholders	Initial Study Report Meeting	11/9/18	5.15(c)(2)
Applicant	Initial Study Report Meeting Summary	11/24/18	5.15(c)(3)
All stakeholders	Any Disputes/Requests to Amend Study Plan Due	12/24/18	5.15(c)(4)
All stakeholders	Responses to Disputes/Amendment Requests Due	1/23/19	5.15(c)(5)
FERC	Director's Determination on Disputes/Amendments	2/22/19	5.15(c)(6)
Applicant	Second Study Season	2019	5.15(a)
Applicant	Updated Study Report due	10/24/19	5.15(f)
All stakeholders	Updated Study Report Meeting	11/8/19	5.15(f)
Applicant	Updated Study Report Meeting Summary	11/23/19	5.15(f)
All stakeholders	Any Disputes/Requests to Amend Study Plan Due	12/23/19	5.15(f)
All stakeholders	Responses to Disputes/Amendment Requests Due	1/22/20	5.15(f)
FERC	Director's Determination on Disputes/Amendments	2/21/20	5.15(f)
Applicant	File Preliminary Licensing Proposal ^d	8/3/19	5.16(a)
All stakeholders	Preliminary Licensing Proposal Comments Due	11/1/19	5.16(e)
Applicant	File Final License Application	12/31/19	5.17
Applicant	Issue Public Notice of License Application Filing	1/14/19	5.17(d)(2)

^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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