FEDERAL ENERGY REGULATORY COMMISSION
Washington, DC 20426
October 17, 2023

OFFICE OF ENERGY PROJECTS

Project No. 1930-090 – California
Kern River No. 1 Hydroelectric Project
Southern California Edison Company

VIA FERC Service

Subject: Scoping Document 2 for the Kern River No. 1 Hydroelectric Project

To the Parties Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing the Pre-Application Document submitted by Southern California Edison for relicensing the Kern River No. 1 Hydroelectric Project (Kern 1 Project) (FERC No. 1930). The project is located on the lower Kern River on the western slope of the Sierra Nevada, approximately 15 miles east of the City of Bakersfield in Kern County, California.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff will prepare either an environmental assessment or an environmental impact statement (collectively referred to as the "NEPA document"), 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 NEPA document is thorough and balanced.

Our preliminary review of the scope of environmental issues to be addressed in our NEPA document was contained in Scoping Document 1 (SD1), which was issued on June 29, 2023. We requested comments on SD1 and held scoping meetings on August 2, 2023, to hear the views of all interested entities on the scope of issues that should be addressed in the NEPA document. We revised SD1 based on the verbal 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 NEPA document, and a revised lists of issues to be addressed in the NEPA document. ***Key changes from SD1 to Scoping Document 2 (SD2) are identified in bold, italicized text.***

SD2 is being distributed to both SCE's distribution list and the Commission's official mailing list for the project (see Section 9.0, *Mailing List* of the attached SD2). 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. Submissions sent via the U.S. Postal Service must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. 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: **Kern River No. 1 Hydroelectric Project No. 1930-090.**

The enclosed SD2 supersedes SD1. SD2 is issued for informational use by all interested parties; no response is required. If you have questions about SD2, the scoping process, or how Commission staff will develop the NEPA document for the project, please contact Jessica Fefer, the Commission's relicensing coordinator for the project at (202) 502-6631 or jessica.fefer@ferc.gov. Additional information about the Commission's licensing process and the project may be obtained from the Commission's website, www.ferc.gov.

Enclosure: Scoping Document 2

SCOPING DOCUMENT 2

KERN RIVER NO. 1 HYDROELECTRIC PROJECT

PROJECT NO. 1930

CALIFORNIA

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

October 17, 2023

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SCOPING DOCUMENT 1

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 continued operation, and maintenance of non-federal hydroelectric projects. On May 5, 2023, Southern California Edison Company (SCE) filed a Pre-Application Document (PAD) and Notice of Intent (NOI) to seek a new license for the Kern River No. 1 Hydroelectric Project (Kern 1 Project or project) (FERC Project No. 1930).[2] The Kern 1 Project is located on the lower Kern River on the western slope of the Sierra Nevada, approximately 15 miles east of the City of Bakersfield in Kern County, California. The existing FERC project boundary encompasses federal land within the Sequoia National Forest administered by the U.S. Forest Service (Forest Service). The total installed capacity of the project powerhouse is 26.3 megawatts (MW) and the average annual generation from 2018 to 2022 ***ranged from*** 119,548 ***to 173,613*** megawatt-hours. Section 3.0, *Proposed Action and Alternatives* provides a detailed description of the project, and Figure 1 shows the project location and the primary project facilities.

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 project as proposed and consider reasonable alternatives.[4] We will prepare an environmental document (NEPA document) that describes and evaluates the probable effects, if any, of the licensee's proposed action and alternatives. The Commission's scoping process will help determine the required level of analysis and satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an environmental assessment (EA) or an environmental impact statement (EIS).

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[1] 16 U.S.C. § 791(a)-825(r).

[2] The current license for the project was issued on June 16, 1988 and the license expires on May 31, 2028.

[3] 42 U.S.C. §§ 4321-4370(f).

[4] The Council on Environmental Quality (CEQ) issued a final rule on April 20, 2022, revising its regulations for implementing NEPA (see *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act*, 87 Fed. Reg. 23453-70). The Final Rule became effective on May 20, 2022. Commission staff intends to conduct its NEPA review in accordance with CEQ's new regulations.

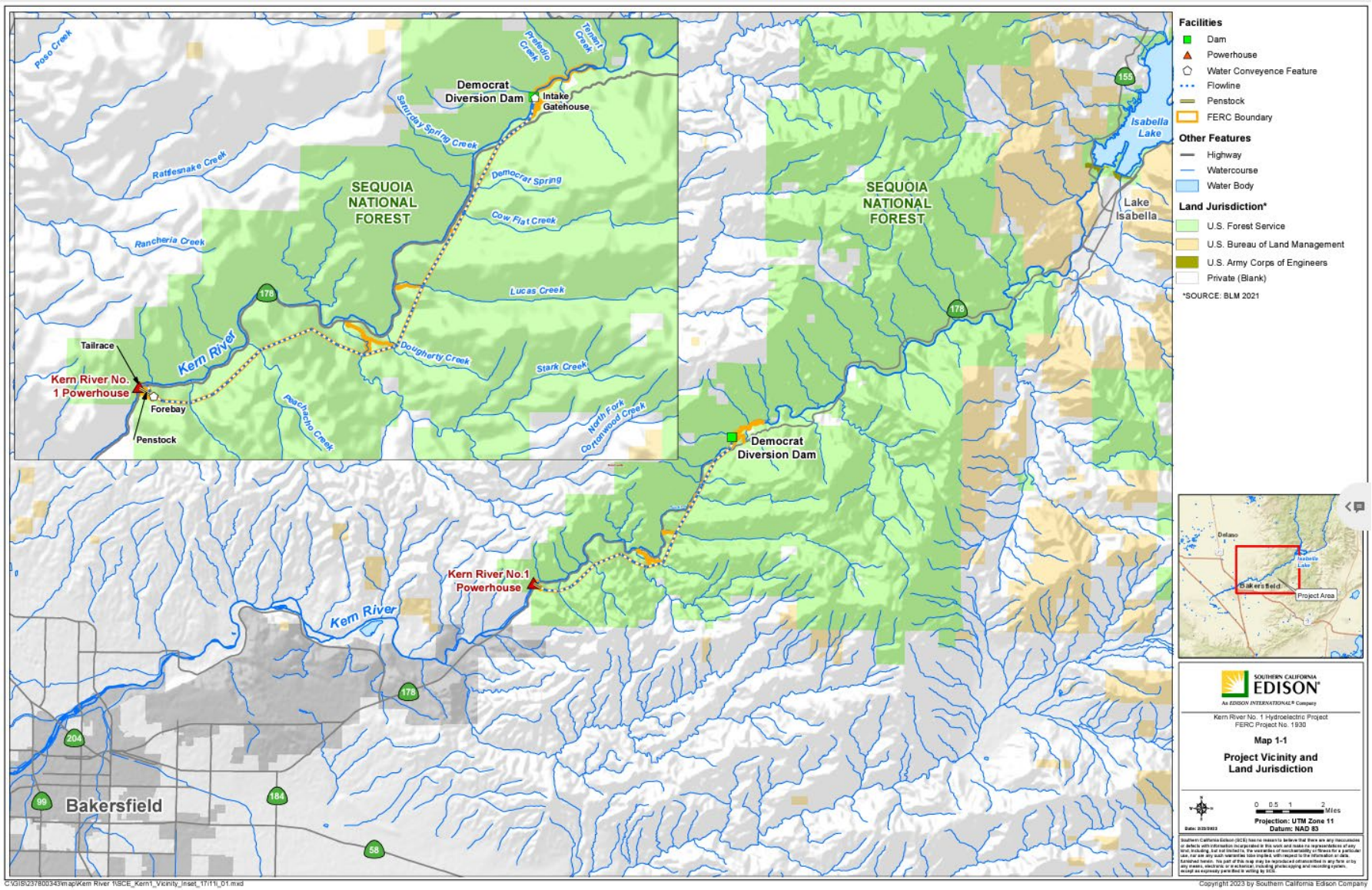

Figure 1. Location and project facilities for the Kern 1 Project (Source: SCE's PAD).

2.0 SCOPING

This Scoping Document 2 (SD2) is intended to advise all participants as to the proposed scope of the Commission's NEPA document and to seek additional information pertinent to this analysis. This document contains: (1) a description of the scoping process and current processing schedule for the license application; (2) a description of the licensee's proposed action and alternatives; (3) a preliminary identification of environmental issues and proposed studies; (4) a request for comments and information; and (5) 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 NEPA document;

- identify reasonable alternatives to the proposed action that should be evaluated in the NEPA document;

- 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 SCOPING COMMENTS AND MEETINGS

Commission staff issued Scoping Document 1 (SD1) on June 29, 2023, to enable resource agencies, Native-American Tribes, NGOs, and the public to participate more effectively, and contribute to, the scoping process. In SD1, we requested clarification of preliminary issues concerning the project and identification of any new issues that needed to be addressed in the NEPA document. Commission staff attended an environmental site review on August 1, 2023, and held scoping meetings on August 2, 2023, in Kern County, California. The scoping meetings were transcribed by a court reporter. We also solicited written comments, recommendations, and information on SD1.

We revised SD1 following the scoping meetings and after reviewing comments filed during the scoping comment period, which ended September 5, 2023. SD2 presents our current view of issues to be considered in the NEPA document. ***To facilitate review, key changes from SD1 to SD2 are identified in bold, italicized type.***

Commenter	***Filing Date***
Neil Nirkik	***7/6/2023***
National Park Service	***8/31/2023***
SCE	***8/31/2023***
California State Water Resources Control Board	***9/1/2023***
Kern River Boaters	***9/5/2023***
American Whitewater	***9/5/2023***

Scoping meeting transcripts and all comments received are part of the Commission's official record for the project. Information in the official file is available for review on the Commission's website at https://www.ferc.gov, using the "eLibrary" link.

2.3 ISSUES RAISED DURING SCOPING

The issues raised by participants in the scoping process are summarized below. We revised SD1 to address only those comments relating directly to the scope of environmental issues. Further, we do not address recommendations for license conditions, such as protection, mitigation, and enhancement (PM&E) measures (e.g., specific whitewater flow releases, resource management plans), as these recommendations will be addressed in the NEPA document, or any license order issued for the project. We also do not address requests for studies in the scoping document as these requests will be addressed through the ILP's study plan development process. After Commission staff accept the license application for filing and determine we have sufficient information to evaluate environmental resource and engineering issues, we will request final terms, conditions, recommendations, and comments when we issue our Ready for Environmental Analysis Notice. Finally, we do not address comments or recommendations that are administrative in nature or outside of the Commission's authority for relicensing the project.

General Comments

Comment: Neil Nirkik commented that the Diversion Dam and Impoundment spillovers are not governed by natural flows in the Kern River.

***Response**: Staff revised section 3.1.1, Existing Project Facilities, to remove indication of a natural flow in the sentence referenced.*

***Comment**: SCE commented that the average annual project generation from 2018 to 2021 ranged from 119,548 to 173,613 megawatt-hours.*

***Response**: Staff revised section 1.0, Introduction, to reflect an annual generation from 2018 to 2022 ranging from 119,548 to 173,613 megawatt-hours.*

***Comment**: SCE commented that the License Application due dates referenced in section 7.0, Current Processing Schedule, and Appendix A of SD1 should be revised.*

***Response**: Staff revised the due dates in Section 7.0, Current Processing Schedule, and Appendix A of SD1.*

Alternatives to the Proposed Project

***Comment**: Neil Nirkik questions how the Commission can conclude that there is no need to include a non-power license as a feasible alternative in the analysis, especially given the increasing capacity of solar generation in the region and state and the small amount of energy produced by the project.*

***Response**: A non-power license requires that another agency be authorized and willing to assume regulatory authority and supervision over the lands and facilities covered by the non-power license. At this time, no government agency has suggested a willingness or ability to take over the project and no party has sought a non-power license. Therefore, the Commission has no authority nor basis for concluding that the Kern 1 Project should no longer be used to produce power.*

***Comment**: Neil Nirkik and American Whitewater comment that the NEPA document should address a decommissioning alternative. Neil Nirkik notes that the Kern 1 Project provides a small fraction of the generation capacity that exists in California and a small fraction of SCE's generation capacity.*

***Response**: Commission policy has held that decommissioning is not a reasonable alternative, if not proposed by the licensee (SCE). Further, the relicensing process for the project is currently in the pre-filing stage of the Commission's Integrated Licensing Process (ILP). The purpose of the pre-filing process is to inform stakeholders about the project proposal, consult with stakeholders to identify issues (i.e., scoping), identify study needs, and to gather information and conduct studies to provide information for the licensee to prepare its license application for filing with the Commission. Information in the application and the project record is used to inform staff's environmental analysis and evaluate recommendations for environmental*

measures in the NEPA document. Therefore, it is premature to demonstrate whether any potential serious resource issues exist that could not be mitigated with appropriate measures to include in any license issued for the project that would make decommissioning a reasonable alternative.

Cumulative Effects

Comment: Neil Nirkik comments that (1) effects of continued project operation and maintenance on recreation resources, and (2) adequacy of existing recreation facilities to meet current and future recreation demand, should be analyzed as both site-specific and cumulative effects. American Whitewater commented that all recreation resources should be studied for both cumulative and site-specific effects.

Response: Staff have revised Section 4.2.6, Recreation Resources, to indicate our intention to analyze all recreation resources for both site-specific and cumulative effects.

Comment: Neil Nirkik comments that Socioeconomics should be analyzed for both cumulative and site-specific effects.

Response: As indicated in Section 4.2.9, Socioeconomics, of this document, Commission staff will analyze site specific potential effects of the project socioeconomics. Additionally, Neil Nirkik did not provide justification for including the scope of the socioeconomics resources to be analyzed for cumulative effects. Therefore, we have no basis for adopting the cumulative socioeconomics recommendation at this time.

Comment: Neil Nirkik comments that Cultural and Tribal Resources should be analyzed for both cumulative and site-specific effects.

Response: See staff's comments below under Cultural and Tribal Resources.

Geologic Resources

Comment: Kern River Boaters (KRB) comments on the project's potential and continuing impacts on the Canyon (Along the Highway 178 from Kern River water conveyance).

Response: Staff have revised Section 4.2.1, Geologic and Soils Resources, to analyze the project's effect on the potential and continuing impacts on the Canyon (Along the Highway 178 from Kern River water conveyance).

Recreation Resources

Comment*: *The National Park Service comments that recreation access should be analyzed in the NEPA document along with the other recreation resource issues identified in SD1.

Response*: *Staff revised Section 4.2.6, Recreation Resources, to include the adequacy of existing project access to project waters and trails to meet current and future recreation demand in the NEPA document.

Comment*: *KRB comments that the relicensing process should include a requirement for SCE to provide instantaneous flow information online.

Response*: *As indicated in Section 4.2.6 of this document, Commission staff will analyze the potential effects of project operation on recreation access, including white water boating access.

Comment*: *KRB comments that there are whitewater stretches in the project boundary that are underutilized due to the project diversion and therefore the diversion should be frequently restricted to allow for more boating use.

Response*: *As indicated in Section 4.2.6 of this document, Commission staff will analyze the potential effects of project operation on recreation access, including white water boating access.

Socioeconomics

Comment*: *SCE comments that the project is in the Kern River watershed, not the North Fork Kern River Watershed.

Response*: *Staff have revised Section 4.2.9, Socioeconomics, to correct the watershed from the North Fork Kern River Watershed to the Kern River Watershed

Comment*: *SCE comments that relicensing the project would not influence socioeconomics because the project is a non-consumptive use of water with no usable storage at the Democrat Dam Impoundment.

Response*: *As stated in Section 4.2 of this SD2, we have identified a list of potential environmental issues to be addressed in the NEPA document by resource area by reviewing the PAD and the Commission's public record for the Kern 1 Project. 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 NEPA document. Therefore, we have not modified section 4.2.9 Socioeconomics

Comment*: *American Whitewater comments that the Commission should make note of the tourism economy alongside other potential socioeconomic impacts.

***Response**: Staff have revised Section 4.2.9, Socioeconomics, to analyze the effect of the tourism economy alongside other potential socioeconomic impacts and recreation economics.*

Cultural and Tribal Resources

***Comment**: Neil Nirkik comments that cumulative and site-specific project-related effects may affect resources of religious, cultural, and traditional importance to Indian tribes within a much larger regional context than just the project area.*

***Response**: For our environmental review in the NEPA document, we consider the geographic extent of the study area and area of potential effects (APE) for tribal resources to include an area within 5 miles of the smaller APE for the FERC project area. We will also consider additional potential effects to tribal resources within this 5-mile area, such as visual and audio effects and any cumulative effects that may extend beyond the project area.*

Environmental Justice

***Comment**: KRB comments that an analysis of economic justice should be analyzed as well as environmental justice.*

***Response**: Per Executive Orders 12898 and 14008, the Commission is responsible for analyzing environmental justice issues, which involves an analysis of whether minority and low-income communities are subject to disproportionately high adverse health or environmental effects as a result of the Kern 1 Project. Staff intend to use EPA's EJSCREEN tool to conduct a block-level analysis of whether there are environmental justice communities, based on race and income, in the vicinity of the project.*

***Comment**: KRB comments that the day uses of the project area disproportionately come from communities suffering economically and environmentally, and that there are limited opportunities for quality outdoor recreation at the same low cost. The projects effects on river aesthetics, water quality, and the fishery disproportionately affect environmental justice communities.*

***Response**: Per Executive Orders 12898 and 14008, the Commission is responsible for analyzing environmental justice issues, which involves an analysis of whether minority and low-income communities are subject to disproportionately high adverse health or environmental effects as a result of the Kern 1 Project. Also, there will be opportunities to request specific information (e.g., river user characteristics) during the study plan development 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) SCE's proposed action, and (3) alternatives to the proposed action.

3.1 NO-ACTION ALTERNATIVE

Under the no-action alternative, the Kern 1 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

Diversion Dam and Impoundment

Democrat Dam is located on the Kern River approximately 10.2 miles upstream of the powerhouse. The dam is a 58-foot-high cyclopean-concrete overflow gravity dam. The crest of the dam is at an elevation of 1,913 feet and approximately 29 feet is exposed above the stream bed. The crest length is 204 feet with a radiused top approximately 7 feet wide. The crest of the dam also serves as a spillway and is designed to spill river flows that are not diverted for power production.

The Democrat Dam Impoundment is approximately 27 acres and has a gross storage capacity of 247 acre-feet (ac-ft) at an elevation of 1,913 feet. However, there is no usable storage at the diversion dam. Since Democrat Dam is a run-of-river dam and its whole crest is a spillway, the dam regularly spills and the impoundment and tailwater levels are governed by flows in the Kern River. A 329-foot-long drainage tunnel with a 72-inch electric motor operated sluice gate is located at the base of dam.

Intake Structure

Water is diverted near the dam into the intake structure which includes two bar rack screens (trash racks). One screen is located immediately adjacent to the diversion dam and the other screen is located approximately 40 feet upstream. The screens are constructed of steel plates on two-inch centers with overall widths of 36 feet and 30 feet, respectively. They are designed to produce relatively low approach velocities. The height of the submerged portion of the screen face is somewhat dependent on sediment build up but averages approximately 11 feet when the impoundment is full.

Water Conveyance System

The diverted water is conveyed through an approximately 8.5-mile-long water conveyance system consisting of a sandbox, flowline, forebay, and penstock which connects the intake structure at Democrat Dam with the powerhouse. The water conveyance system runs along the eastern hillslope above the Kern River. Two intake gates to the water conveyance system are hydraulically operated and are automatically controlled by impoundment and flume water controllers. The diverted water flows under gravity from an elevation of approximately 1,913 feet at the diversion dam to the top of the penstock at an elevation of approximately 1,830 feet.

Sandbox

A sandbox is located approximately 700 feet downstream of the diversion dam at the head of the flowline. The sandbox is 104 feet long and has a maximum width of 20 feet. The sandbox acts as a sediment trap, preventing the entry of sediments into the flowline and downstream of the project's powerhouse. Two slide gate valves with orifice plates are located on the bottom, downstream end of the sandbox. One of the valves is used to provide continuous minimum instream flow release as required by the current license for the project. Since continuous flow occurs there is no formal operational program for flushing accumulated sediments from the sandbox. No significant sediment accumulation occurs in the sandbox due to upstream sediment trapping in large pools in the river, Democrat Dam Impoundment, and in Lake Isabella.

Flowline

From the sandbox, water enters Flume No. 1 and is conveyed through the remaining series of tunnels, flumes, and conduits comprising the flowline. The water conveyance system is designed to carry a maximum of 412 cubic feet per second (cfs) under optimum conditions.

There are 19 below-ground tunnel segments totaling 42,884 feet, numbered sequentially north to south. Tunnel segments have concrete floors with a typical width of 8 feet and vertical walls with a typical height of 7 feet. Approximately 16,000 feet of tunnel has a concrete roof cap placed in areas judged during construction to have potentially unstable rock, while the remainder of the tunnel has a natural rock roof.

The above-ground sections of the conveyance system, flumes and conduits, are generally located between tunnel segments. Similar to the tunnel segments, they are also numbered sequentially from north to south. The flowline includes six flume structures, including 390 feet of rectangular flume and 904 feet of Lennon flume on steel structures. There is also a total of 612 feet of arched-concrete conduit along nine conduit segments.

Nine tunnel portal access points, or adits, are located at various tunnel or tunnel / flume junctions along the flowline and provide access for maintenance activities.

Forebay

The forebay is a 45-foot-long, 33-foot-wide, and 11-foot-deep concrete gravity structure that impounds water (less than 1 ac-ft) to regulate flow to the powerhouse. Water enters the forebay via Tunnel No. 19 and flows into the primary of two reinforced concrete bays. The primary bay contains the penstock intake that is fitted with a trashrack. Inflow into the forebay is controlled by two butterfly valves at the tunnel outfall. Inflow into the penstock is controlled by two more butterfly valves located just downstream of the trashrack. All the butterfly valves can be remotely operated, but normally are manually operated at the forebay. The secondary bay is immediately to the left of the primary bay and is partitioned from it by a wall that is several feet lower than the outer retaining wall that contains both bays. The secondary bay serves as a spillway by allowing water to overflow from the primary bay and exit the structure via a 1,362-foot spillway overflow pipe that discharges into the Kern River. The above-ground overflow spillway pipe is supported by concrete piers and varies in diameter from 65 inches at the forebay to 44 inches just prior to entering the river. The primary/secondary bay partition wall is also fitted with a slide gate that can be opened to drain the forebay.

Penstock

From the forebay, an approximately 1,693-foot-long buried steel penstock carries water to the powerhouse. To increase velocity and pressure, the inside diameter of the penstock decreases over the length of the pipe, with a diameter of approximately 108 inches at the forebay tapering down to approximately 71 inches at the powerhouse. The penstock conveys water to the turbines through a manifold system. The static head is 877 feet. An adit is located near the penstock to provide access for maintenance activities.

Powerhouse and Associate Equipment

The powerhouse is an approximately 71-foot by 170-foot concrete structure located on the left bank of Kern River. Water to the powerhouse is supplied from the forebay through a single penstock. Water exiting the powerhouse enters a tailrace before being returned to the river. The switchyard is located directly adjacent to and south of the powerhouse. Other ancillary facilities located near the powerhouse include a machine shop, office / lunchroom, and restroom facilities.

Turbines and Generators

The powerhouse contains four Allis-Chalmers turbines (double overhung, single-jet, impulse type) rated at a total of 43,000 horsepower (HP). Individual turbine installed ratings are as follows:

- Unit 1: 10,750 HP, design head 865 feet and 300 revolutions per minute (RPM)
- Unit 2: 10,750 HP, design head 865 feet and 300 RPM
- Unit 3: 10,750 HP, design head 865 feet and 300 RPM
- Unit 4: 10,750 HP, design head 865 feet and 300 RPM

The four main generators are horizontal shaft General Electric units with a total installed capacity of 26,280 kilowatts (kW) or 26.3 MW. The main generator installed ratings as follows:

- Unit 1: 6,570 kW, 0.9 power factor, 2.7 kilovolt (kV), three-phase, 60 hertz (Hz)
- Unit 2: 6,570 kW, 0.9 power factor, 2.7 kV, three-phase, 60 Hz
- Unit 3: 6,570 kW, 0.9 power factor, 2.7 kV, three-phase, 60 Hz
- Unit 4: 6,570 kW, 0.9 power factor, 2.7 kV, three-phase, 60 Hz

The powerhouse is normally unattended. Start-up and shut-down of the turbine/generator equipment is manually performed by the operators based at the Kern River No. 3 powerhouse (FERC project No. 2290).

Tailrace

Water is returned to the Kern River by the tailrace on the upstream side of the powerhouse. The tailrace slows the water exiting the powerhouse as it re-enters the river. Water from the tailrace is impounded behind the Kern Canyon Project (FERC Project No. 178) diversion structure immediately downstream.

Switchyard

The switchyard is located adjacent to the powerhouse. The project transformer banks are connected to two 66-kV busses (non-project) through four, 3-pole, 66-kV, 1,200 amperes (amp), oil circuit breakers together with the necessary disconnecting switches, potential devices, and related equipment.

Controls

Necessary devices are installed to make the operation of the powerhouse semiautomatic. These consist of electrically operated alarm circuits for low-water pressure, alarms for generator and bearing oil temperature, automatic-trip oil circuit breakers, switchboards, meters, relays, instrument transformers, station light and power transformers, and selsyn water-level load control. This equipment transmits status signals, telemetering, and alarms to Kern River No. 3 Powerhouse, FERC Project No. 2290, and the Eastern Hydro Operations Center. The station load control equipment consists of a solid-state electronic controller which receives forebay level data via a transducer at the forebay and actuates motors to open or close the turbine power needles to regulate forebay level and unit loading.

Access Roads and Trails

The project includes various access roads and trails that are used for routine operation and maintenance of the project. There are 8 access roads (2.35 miles in total) and 10 access trails (4.73 miles in total) within the project boundary.

Communication and Power Lines

The project includes the following communication and power lines:

- Intake Gatehouse to Flume No. 1 Powerline: A 1,844-foot-long (0.35 mile) powerline that extends from the Democrat Dam Intake Gatehouse to an outlet box near the southern end of Flume No. 1 and provides power for appurtenances during tunnel outages.
- Powerhouse to Forebay Communication / Powerline: A 1,665-foot-long (0.32 mile) communication line extends from the powerhouse to the forebay at the upper end of the penstock. The same poles which carry the communication line also carry a powerline which is used for the remote control of the gate at the upper end of the penstock.

There are no transmission facilities associated with the project.

Gaging Stations

The project includes the following gaging stations that monitor and record water flow for compliance:

- Kern River near Democrat Springs (United States Geological Survey [USGS] Gage No. 11192500; SCE Gage No. 409) – This gage is located about 0.4 mile

downstream of the diversion dam. The streamflow is measured using a float and an A-35 recorder. Data collected from this gage represents flow in the Kern River, below the diversion dam.

- Kern River No. 1 Conduit near Democrat Springs (USGS Gage No. 11192000; SCE Gage No. 410) – This gage is located on the Kern River No. 1 Flowline near Cow Flat Creek. Streamflow is measured using a float and an A-35 recorder. Data collected from this gage represents flow diverted for the project.
- Kern River near Democrat Springs + Conduit (USGS Gage No. 11192501) – Data for this gage is computed by combining the data collected in the bypass reach (USGS Gage No. 11192500) and the flowline (USGS Gage No. 11192000). For record keeping purposes, the USGS has numbered this gage 11192501 and compiles data as if it were an actual gage.

In addition, there are two stilling wells, one in the Kern River downstream of Democrat Dam near the gaging cableway, and one in Flume No. 2 at Cow Flat Creek. The stilling wells measure water level in the Kern River and the water conveyance system.

3.1.2 Existing Project Operation

The project is operated in compliance with existing regulatory requirements, agreements, and water rights to generate power.

Water Management

Kern River Watershed Overview

The Kern River Watershed consists of two principal forks, the North Fork and South Fork, and a lower portion referred to as the lower Kern River. Both forks flow generally southward and converge at Lake Isabella. The Kern River exits Lake Isabella and flows west toward the San Joaquin Valley and terminates in Buena Vista Lake about 20 miles southwest of Bakersfield.

Lake Isabella, a 568,075 acre-foot reservoir owned and operated by the U.S. Army Corps of Engineers (USACE), is managed primarily for flood control, irrigation water storage, and delivery and the hydrology of the lower Kern River is dominated by its operations. There are five FERC-licensed hydroelectric projects located on the Kern River at or below Lake Isabella. All the hydroelectric projects are non-consumptive users of water and are listed below from upstream to downstream.

- Isabella Partners' 11.95-MW Isabella Hydroelectric Project (FERC No. 8377) is located on the downstream toe of the main (USACE)-owned dam at Lake Isabella

and diverts its water at the dam outlet works. The total rate of diversion under existing permits is 1,632 cfs.

- SCE's 12.0-MW Borel Hydroelectric Project (FERC No. 382) is currently nonoperational and is in the process of being decommissioned by SCE.

- SCE's 26.3-MW Kern River No. 1 Hydroelectric Project (FERC No. 1930) is operated as a run-of-the-river power generation facility at Democrat Dam. The maximum diversion capacity for power generation is 412 cfs.

- Kern and Tule Hydro LLC's 11.475-MW Kern Canyon Hydroelectric Project (FERC No. 178) was recently purchased from Pacific Gas and Electric Company (PG&E).

- Olcese Water District's 14.0-MW Rio Bravo Hydroelectric Project (FERC No. 4129) includes 5,100 acres of land and supplies irrigation water to agricultural lands and a golf course.

The Kern 1 Project is operated in a run-of-river mode. Water captured at the Democratic Dam diversion structure is transported through a connecting flowline and penstock to the powerhouse and then returned to the river through the powerhouse tailrace 10.2 miles downstream. SCE's Kern 1 Project has diversion rights of 412 cfs, which is the maximum capacity of the diversion. The current project license requires a minimum instream flow of 50 cfs to be released to the bypass reach from June 1 to September 30 and 15 cfs released between October 1 and May 31, or inflow if lower than the seasonal flow requirement. The amount and timing of flow diverted is a function of releases from Lake Isabella, flowline and powerhouse capacities, and minimum instream flow requirements. Water exiting the project tailrace is immediately impounded behind Kern and Tule LLC's diversion for the Kern Canyon Project.

Project Generation and Recent Outflow Records

During the current license period (January 1999 through December 2022), annual generation ranged from 44,254 MWh (when the project was taken offline for maintenance) up to 188,247 MWh. As the project operates in a run-of-river mode and essentially has not storage, the estimated dependable generating capacity of the project is 24.8 MWh.

A summary of project generation and outflow records for operations (annually and quarterly) for the five years preceding filing of the PAD (2018 to 2022) is provided in Table 1. The summary presents the last five complete years of available records for project operation. During this period annual generation ranged from 119,548 MWh to 173,613, and annual outflow ranged from 152,957 ac-ft to 220,380 ac-ft.

Table 1. Summary of Project Generation and Outflows (2018 – 2022).

Year	Quarter	Flow (acre-feet)	Generation (MWh)
2018	1	40,440	31,754
	2	66,020	51,886
	3	63,400	49,762
	4	33,750	26,950
	2018 Annual Total	**203,610**	**160, 352**
2019	1	36,860	29,287
	2	65,800	51,056
	3	66,060	53,378
	4	51,660	39,892
	2019 Annual Total	**220,380**	**173,613**
2020	1	45,160	34,637
	2	70,420	54,025
	3	59,030	45,852
	4	27,260	22,276
	2020 Annual Total	**201,870**	**156,790**
2021	1	39,690	31,373
	2	64,740	50,541
	3	24,950	19,630
	4	25,640	20,814
	2021 Annual Total	**155,020**	**122,358**
2022	1	22,657	18,091
	2	67,050	51,859
	3	44,320	34,456
	4	18,930	15,142
	2022 Annual Total	**152,957**	**119,548**

3.2 SCE'S PROPOSAL

3.2.1 Proposed Project Facilities and Operations

The proposed action is to continue to operate and maintain the project as required by the existing license. No new or upgraded facilities, structural changes, or operational changes to the project are proposed by SCE at this time.

The PAD states that SCE will review the existing project boundary and, if applicable, propose revisions needed to: (1) include facilities necessary for project

operation and maintenance; and (2) exclude lands within the current project boundary that are not necessary for project operation and maintenance. The PAD does not specify which lands it proposes to add to, or subtract from, the existing project boundary.

3.2.2 Proposed Environmental Measures

The environmental measures that are currently proposed by SCE as part of the relicensing process include obtaining a new Sediment Management permit that could result in new permit conditions. To manage vegetation, SCE proposes to apply herbicides to the surface of all project trails, and within an area around the project forebay out to 3 to 5 feet of its perimeter fence.

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, 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 NEPA document.

3.5.1 Federal Government Takeover

In accordance with § 16.14 of the Commission's regulations, a federal department or agency may file a recommendation that the United States exercise its right to take over a hydroelectric power project with a license that is subject to Sections 14 and 15 of the

FPA.[5] We do not consider federal takeover to be a reasonable alternative. Federal takeover of the project would require congressional approval. While that fact alone would not preclude further consideration of this alternative, there is currently no evidence showing that federal takeover should be recommended to Congress. No party has suggested that federal takeover would be appropriate, and no federal agency has expressed interest in operating the project.

3.5.2 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 Kern 1 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.

[5] 16 U.S.C. §§ 791(a)-825(r).

3.5.3 Project Decommissioning

As the Commission has previously held, decommissioning is not a reasonable alternative to relicensing in most cases.[6] Decommissioning can be accomplished in different ways depending on the project, its environment, and the particular resource needs.[7] For these reasons, the Commission does not speculate about possible decommissioning measures at the time of relicensing, but rather waits until an applicant actually proposes to decommission a project, or a participant in a relicensing proceeding demonstrates that there are serious resource concerns that cannot be addressed with appropriate license measures and that make decommissioning a reasonable alternative.[8] SCE does not propose decommissioning, nor does the record to date demonstrate there are serious resource concerns that cannot be mitigated if the project is relicensed; as such, there is no reason, at this time, to include decommissioning as a reasonable alternative to be evaluated and studied as part of staff's NEPA analysis.

[6] *See, e.g., Eagle Crest Energy Co*., 153 FERC ¶ 61,058, at P 67 (2015); *Public Utility District No. 1 of Pend Oreille County*, 112 FERC ¶ 61,055, at P 82 (2005); *Midwest Hydro, Inc*., 111 FERC ¶ 61,327, at PP 35-38 (2005).

[7] In the unlikely event that the Commission denies relicensing a project or a licensee decides to surrender an existing project, the Commission must approve a surrender "upon such conditions with respect to the disposition of such works as may be determined by the Commission." 18 C.F.R. § 6.2 (2020). This can include simply shutting down the power operations, removing all or parts of the project (including the dam), or restoring the site to its pre-project condition.

[8] *See* generally *Project Decommissioning at Relicensing*; Policy Statement, FERC Stats. & Regs., Regulations Preambles (1991-1996), ¶ 31,011 (1994); *see also City of Tacoma, Washington,* 110 FERC ¶ 61,140 (2005) (finding that unless and until the Commission has a specific decommissioning proposal, any further environmental analysis of the effects of project decommissioning would be both premature and speculative).

4.0 SCOPE OF CUMULATIVE EFFECTS AND SITEE-SPECIFIC RESOURCE ISSUES

4.1 CUMULATAIVE 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 Kern 1 Project, ***information received during the scoping process,*** and preliminary staff analysis, we have identified water quantity and quality, aquatic and fishery resources, and ***recreation*** as resources that could be cumulatively affected by the proposed continued operation and maintenance of the Kern 1 Project in combination with other hydroelectric projects and other activities in the Kern 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 Kern River Basin. We have identified the geographic scope for water quantity and quality to include the Kern River Basin from its headwaters to the city of Bakersfield where all flow is diverted for consumptive uses. We chose this geographic scope because the operation and maintenance of the Kern 1 Project, in combination with other hydroelectric projects in the Kern River Basin may affect water quality of the Kern River.

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 potential environmental issues to be addressed in the NEPA document. We identified these issues, which are listed by resource area, by reviewing the PAD and the Commission's public record for the Kern 1 Project, ***including information received during the scoping process***. 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 NEPA document. 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 turbidity and suspended sediment loads.
- Potential effects of bank erosion within the bypassed reach.
- Effects of hillslope erosion within the bypassed reach.
- Potential effects of sediment movement on or within the project shorelines and streambanks along the Democrat impoundment.
- ***Analyze the project's effect on the potential and continuing impacts on the Canyon (Along the Highway 178 from Kern River water conveyance).***

4.2.2 Water Resources

- Effects of continued project operation on hydrology ***and water availability*** of the lower Fork Kern River in the project bypassed reach and downstream of the powerhouse.*
- Effects of continued project operation on water quality in the project bypassed reach and downstream of the powerhouse.*

4.2.3 Aquatic and Fishery Resources

- Effects of continued project operation on fish habitat and fish resources in the project impoundment, bypassed reach, and downstream of the powerhouse.*
- Effects of continued project operation on western pearlshell mussel in the project area.*
- Effects of project water diversions and instream flow on fish habitat in the project bypassed reach.*

- Effects of fish entrainment at Democrat Dam on fish resources in the project area.*
- Effects of Democrat dam on upstream and downstream fish passage.*

4.2.4 Terrestrial Resources

- Effects of continued operation and maintenance of the project, including the use of project roads and trails, that could potentially introduce and spread non-native, invasive plant species including the potential effects of invasive plants on native plant communities, special-status species, and wildlife habitat.
- Effects of continued operation and maintenance of the project that could potentially promote suitable conditions for the spread of non-native, invasive wildlife species, including the American bullfrog (*Rana catesbeiana*), Asian clam (*Corbicula fluminea*), and crayfish species and their potential effects on native aquatic, semi-aquatic, and terrestrial wildlife.
- Effects of the timing and magnitude of flows resulting from continued operation of the project, and project maintenance activities on wetlands and riparian habitat along the Kern River, including the bypassed reach.
- Effects of continued project operation and maintenance activities including vegetation management and herbicide use on native vegetation and wildlife, game species, and the special-status species identified in SCE's PAD,[9] including Sequoia National Forest Species of Conservation Concern and nesting migratory bird species.[10]
- Effects of project facilities that present potential entrapment hazards to wildlife including open-air flumes.

4.2.5 Threatened and Endangered Species

- Effects of continued project operation and maintenance activities on species designated as federally threatened, endangered, proposed, or candidates for

[9] Sections 3.6.2.2 *Special-Status Plants* and 3.6.3.2 *Special-Status Wildlife* of the PAD describe the special-status species known to occur or that may potentially occur in the vicinity of the project.

[10] Migratory birds include any species protected under the Migratory Bird Treaty Act (50 CFR 10.13).

listing, and designated critical habitat (proposed and final), under the Endangered Species Act (ESA), including the species listed below.[11, 12]

Endangered Species: Southern Sierra Nevada Distinct Population Segment (DPS) of fisher (*Pekania pennanti*), ***South Sierra DPS of foothill yellow-legged frog (Rana boylii)***[13], San Joaquin kit fox (*Vulpes macrotis mutica*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), California condor (*Gymnogyps californianus*), southwestern willow flycatcher (*Empidonax traillii extimus*), Bakersfield cactus (*Opuntia treleasei*), California jewelflower (*Caulanthus californicus*), and San Joaquin Wooly-threads (*Monolopia* (*=Lembertia*) *congdonii*)

Threatened Species: Vernal pool fairy shrimp (*Branchinecta lynchi*) and San Joaquin adobe sunburst (*Pseudobahia peirsonii*)

Proposed Endangered Species: ~~***South Sierra DPS of foothill yellow-legged frog (Rana boylii) and***~~ relictual slender salamander (*Batrachoseps relictus*) and its proposed critical habitat

Proposed Threatened Species: Sierra Nevada DPS of California spotted owl (*Strix occidentalis occidentalis*) and Kern Canyon slender salamander (*Batrachoseps simatus*) and its proposed critical habitat

Candidate Species: Monarch butterfly (*Danaus plexippus*)

4.2.6 Recreation Resources

- Effects of continued project operation and maintenance on recreation resources.*****

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[11] ***On September 27, 2023, staff accessed the U.S. Fish and Wildlife Service's Information for Planning and Consultation system to generate the official list of species and critical habitat designated under the ESA potentially occurring in the project area. The list can be accessed on the Commission's public record for the project at: https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230927-3023.***

[12] ***Although, proposed or final critical habitat is designated for the southern Sierra Nevada DPS of Fisher, California condor, southwestern willow flycatcher, and vernal pool fairy shrimp the critical habitat units for these species they do not overlap or occur downstream of the project.***

[13] ***The final rule to list the South Sierra DPS of foothill yellow-legged frog was publish August 29, 2023, and the rule became effective on September 28, 2023 (88 Fed. Reg. 59,698).***

- Adequacy of existing recreation facilities to meet current and future recreation demand.*****
- ***Adequacy of existing project access to project waters and trails to meet current and future recreation demand.****
- Effects of project operation and maintenance on recreational white water boating use in the project bypassed reach.*****

4.2.7 Land Use and Aesthetic Resources

- Effects of continued project operation and maintenance on land use.
- Effects of continued project operation and maintenance on the aesthetic quality of the project area.

4.2.8 Cultural and Tribal Resources

- Effects of continued project operation and maintenance on historic or archaeological resources, and traditional cultural properties that may be eligible for inclusion in the National Register of Historic Places, or on other areas or places of religious, cultural, and traditional importance to Indian tribes.

4.2.9 Socioeconomics

- Effects of continued project operations and flow diversions on agriculture and other consumptive uses in the ***Kern River watershed***.
- Effects of any reduction in the amount of water available for irrigation on agricultural production in Kern County.
- Effects of any reduction in the amount of water available for future water supply deliveries to the City of Bakersfield.
- ***Effect of the tourism economy alongside other potential socioeconomic impacts and recreation economics.***

4.2.10 Environmental Justice

- Effects of project operation and maintenance of identified environmental justice communities.

5.0 PROPOSED STUDIES

Depending upon the findings of studies completed by SCE and the recommendations of the consulted entities, SCE will consider, and may propose certain other measures to enhance environmental resources affected by the project as part of the proposed action. SCE's initial study proposals are identified by resource area in Table 3. Detailed information on SCE's initial study proposals can be found in the PAD. Further studies may need to be added to this list based on comments provided to the Commission and SCE from interested participants, including Indian tribes.

Table 2. SCE's initial study proposals for the Kern 1 Project (Source: SCE's PAD Volume I, Appendix C).

PROPOSED STUDIES
Aquatic Resources
Study AQ 1 – Hydrology: SCE proposes to develop a model of project operations with and without the project diversion and refine (as needed) the analysis of hydrology in the PAD *Section 3.3 Water Use and Hydrology.*
Study AQ 2 – Water Quality/Water Temperature: SCE proposes to: (1) collect seasonal water quality (physical, chemical, and bacterial) and water temperature in the impoundment and bypass reach; and (2) compare water quality and water temperature conditions to the objectives/criteria of the Basin Plan (CRWQCB, 2019) and other water quality standards.
Study AQ 3 – Fish Population: SCE proposes to: (1) document fish species composition, distribution, and abundance in the impoundment and bypass reach; and (2) characterize fish size, condition factor, and approximate population age structure in the impoundment and bypass reach.
Terrestrial Resources
Study TERR 1 – Botanical: SCE proposes to document: (1) vegetation alliances, including riparian alliances and wetlands, adjacent to project facilities; and (2) special-status plant populations and non-native, invasive plant species at project facilities.
Study TERR 2 – Wildlife: SCE proposes to: (1) identify special-status wildlife species, including salamanders, within the project boundary; (2) identify potential habitat for special-status salamanders within the project boundary (excluding

underground project features) and 10 feet on either side of project access trails located outside the project boundary and conduct visual encounter surveys to document their presence; (3) determine whether project powerline pole configurations are consistent with guidelines for the avoidance of avian mortalities; and (4) document use of project facilities by special-status bats during reproduction and other seasonal use.
Recreation Resources
Study REC-1 – Recreation Facility Condition Assessment: SCE proposes to: (1) identify, map, and describe public developed recreation facilities in the vicinity of the project, including capacity; and (2) conduct a facility inventory and condition assessment at the public recreation facilities including overflow parking areas, including an evaluation of signage and public safety features; and an assessment of the condition and potential for universal accessibility.
Study REC-2 - Recreation Facility Use Assessment: SCE proposes to: (1) characterize recreation use at the developed public recreation facilities in the project vicinity. Estimate future recreation use in the vicinity of the project using existing use data and published recreation trends information; and (2) document potential public safety issues and existing program and measures that are implemented by SCE to protect public health and safety.
Study Rec-3 - Whitewater boating: SCE proposes to: (1) characterize the whitewater boating run in the Kern 1 Project bypass reach including the length, whitewater difficulty, name of key rapids, and typical access locations for put-in and take-out; (2) identify the range of flows (minimum acceptable and optimum) that would provide whitewater boating opportunities in bypass reach for a variety of watercraft including kayaks, rafts, packrafts, stand-up paddleboards, and body boards; (3) quantify the annual and monthly frequency that minimum acceptable and optimum whitewater flows occur in the bypass reach under current project operations and without project diversion for each watercraft type; (4) describe existing mechanisms for dissemination flow information to the public; and (5) document potential conflicts of whitewater boating flows with other recreation users.
Land Use
Study Land-1 - Road and Trail Condition Assessment: SCE proposes to: (1) document current project road and trail condition by conducting a reconnaissance-level inventory; and (2) document SCE's current maintenance practices and frequency of use along project roads and trails.

Study Land-2 - Erosion and Sedimentation: SCE proposes to: (1) identify historical and existing sources of sediment adjacent to the bypass reach, Democrat Dam Impoundment, water conveyance system, and other project facilities, including major gullies, areas of vegetation and/or soil loss, hillslope destabilization, and mass wasting; (2) document erosion and sedimentation associated with SCE's ongoing O&M activities; and (3) document natural sources of sediment unrelated to the project.
Cultural and Tribal Resources
Study CUL-1 - Built Environment: SCE proposes to: (1) document all built environment cultural resources within the APE; and (2) evaluate or, as appropriate, provide update evaluation under the criteria of the NRHP for bult environment cultural resources in the APE to determine whether built environment historic properties may be affected by O&M of the project.
Study CUL-2 – Archaeology: SCE propose to: (1) document known and currently undocumented archaeological resources within the APE; and (2) evaluate or, as appropriate, provide update evaluation(s) under the criteria of the NRHP for archaeological resources in the APE to determine whether archaeological resources may be affected y O&M of the project and/or develop a NRHP evaluation plan to be implemented as part of the Historic Properties Management Plan (HPMP).
Study TRI 1 – Tribal Resources: SCE proposes to: (1) communicate and consult with Tribes regarding the project; (2) develop an ethnohistory associated with lands in the vicinity of the project which will be used to assist in identification and evaluation of Tribal resources; (3) identify and document Tribal resources in the vicinity of the project. Characterize Tribal values and resources from a Tribal perspective through outreach and contact with Tribal governments and their representatives; (4) evaluate Tribal resources, as appropriate, to determine if they are eligible for listing on the NRHP and determine whether these resources will be affected by actions of the proposed project.

6.0 CURRENT PROCESSING SCHEDULE

The decision on whether to prepare an EA or EIS will be determined after the license application is filed and we fully understand the scope of effects and measures under consideration. The NEPA document will be distributed to all persons and entities on the Commission's service and mailing lists for the Kern 1 Project. The NEPA document 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. The comment period will be specified in the notice of availability of the NEPA document.

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

Major Milestone	Date
FERC Issues SD2	October 17, 2023
SCE Files Proposed Study Plan	October 17, 2023
FERC Issues Study Plan Determination	March 15, 2024
SCE Conducts Studies	Spring/Summer 2024/2025
SCE's Final License Application Due	***June 1, 2026***

A process plan, which has a complete list of relicensing milestones for the Kern 1 Project is attached as Appendix A.

7.0 PROPOSED NEPA DOCUMENT OUTLINE

The preliminary outline for the Kern River No. 1 Hydroelectric Project's NEPA document is as follows:

TABLE OF CONTENTS
LIST OF APPENDICES
LIST OF FIGURES
LIST OF TABLES
ACRONYMS AND ABBREVIATIONS

1.0 INTRODUCTION
- ***1.1 Application***
- ***1.2 Purpose of Action and Need for Power***
- ***1.3 Statutory and Regulatory Requirements***
  - ***1.3.1 Federal Power Act***
    - ***1.3.1.1 Section 18 Fishway Prescriptions***
    - ***1.3.1.2 Section 10(j) Recommendations***
  - ***1.3.2 Clean Water Act***
  - ***1.3.3 Endangered Species Act***
  - ***1.3.4 National Historic Preservation Act***
  - ***1.3.5 Executive Orders 12898 and 14008***
- ***1.4 Public Review and Comment***
  - ***1.4.1 Scoping***
  - ***1.4.2 Interventions***
  - ***1.4.3 Comments on the Application***
  - ***1.4.4 Comments on the Draft Environmental Document***

2.0 PROPOSED ACTION AND ALTERNATIVES
- ***2.1 No-action Alternative***
- ***2.2 Applicant's Proposal***
- ***2.3 Staff Alternative***
- ***2.4 Staff Alternative with Mandatory Conditions***
- ***2.5 Other Alternatives (as appropriate)***
- ***2.6 Alternatives Considered but Eliminated from Detailed Study***
  - ***2.6.1 Federal Government Takeover of the Project***
  - ***2.6.2 Issuing a Nonpower License***
  - ***2.6.3 Retiring the Project***

3.0 ENVIRONMENTAL ANALYSIS
- ***3.1 General Description of the River Basin***
- ***3.2 Proposed Action and Action Alternatives***
  - ***3.2.1 Geology and Soils***
  - ***3.2.2 Water Resources***

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. Commission staff have preliminarily identified and reviewed the plans listed below that may be relevant to the Kern 1 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 https://cms.ferc.gov/media/list-comprehensive-plans.

The following is a list of comprehensive plans currently on file with the Commission that may be relevant to the Kern 1 Project.

Federal Plans

United States Forest Service. 1988. Sequoia National Forest Land and Management Plan. Department of Agriculture, Forest Service, Sequoia National Forest. March 2018.

United States Forest Service. 2004. Sierra Nevada Forest Plan Amendment. Final Supplemental Environmental Impact Statement Record of Decision. Pacific Southwest Region. Department of Agriculture, Vallejo, California. January 2004.

United States Fish and Wildlife Service. No Date. Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service. Washington, D.C.

United States Fish and Wildlife Service. 1990. Central Valley Habitat Joint Venture Implementation Plan: A Component of the North American Waterfowl Management Plan. February 1990.

United States Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American Waterfowl Management Plan. Department of the Interior. Environment Canada.

National Park Service. 1933. *The Nationwide Rivers Inventory*. Department of the Interior, Washington, D.C.

California Plans

California Department of Fish and Game. U.S. Fish and Wildlife Service. 2010. Final Hatchery and Stocking Program Environmental 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. 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 State Water Resources Control Board. 2018. *Water quality control plan for the Tulare Lake Basin.* Sacramento, California. Revised May 2018 (with Approved Amendments).

9.0 MAILING LIST

The list below is the Commission's official mailing list for the Kern River No. 1 Hydroelectric Project (FERC No. 1930). If you want to receive future mailings for the 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: **Kern River No. 1 Hydroelectric Project No. 1930-090**. You may use the same method if requesting removal from the mailing list below.

Register online at https://ferconline.ferc.gov/FERCOnline.aspx 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 Kern River No. 1 Hydroelectric Project

Roger L. Almklov, MD 14915 Oadero Ct. Bakersfield, CA 93306	Ben Austin 5th floor 1115 Truxton Ave. Bakersfield, CA 93301
Kevin Richard Colburn National Stewardship Director American Whitewater 1035 Van Buren Street Missoula, MT 59802	Howard Bailey PO Box 36 Woody, CA 93287
Kevin Baker Po Box 507 Glennville, CA 93226	Boneville Power Administration Pacific NW Hydrosite Database & Analysis Section PO Box 3621 Portland, OR 97208
Boy Scouts of America 2417 M St. Bakersfield, CA 93301	Darlene Brokaw 940 Oriole Dr. Laguna Beach, CA 92651
Bureau of Reclamation Department of the Interior 18th & C Sts, N.W. Washington, DC 20240	Turman L. Burns 856 Sibert Ct. Lafayette, CA 64549

Cal Trans PO Box 12616 Fresno, CA 93778	Bruce Hafenfeld California Cattlemen's Association PO Box 58 Weldon, CA 93283
Kern Fishery District Director CA Department of Fish & Wildlife 1234 E Shaw Ave Fresno, CA 93710	Dale Mitchell CA Department of Fish & Wildlife 1234 E Shaw Ave Fresno, CA 93710
CA Department of Parks & Recreation PO Box 942896 Sacramento, CA 94296	Allen Robertson CA Department of Forestry & Fire 1234 E Shaw St. Fresno, CA 93710
CA Public Utilities Commission 505 Van Ness Ave San Francisco, CA 94102	William Crooks, Executive Officer California Regional Water Quality Control Board Central Valley Reion 1685 E St. Fresno, CA 93706
CA State Lands Commission Suite 100-South 100 Howe Ave Sacramento, CA 95825	Timothy C. Trewyn, Director City of Banning, California PO Box 998 Banning, CA 92220
Bill D. Carnahan Public Utilities Department City of Riverside, California 3900 Main St. Riverside, CA 92522	Wayne S Lifton Senior Aquatic Ecologist, ENTRIX 2890 Gateway Oaks Dr. Ste 200 Sacramento, CA 95833
Jeannie Fox & Phil Evans PO Box 980 Redonodo, CA 90277	Lawrence & Donna Hoopes 3343 Corby Ave Camarillo, CA 93010
Nathan Carver, President Kern CO. Cattlemen's Association PO Box 444 Glennville, CA 93226	Randall Abbott Kern County Planning Department 2700 M St. Bakersfield, CA 93301
Kern County Public Works Department Suite 500 2700 M St. Bakersfield, CA 93301	Jon Mcquiston, Supervisor Kern County Board of Supervisors 1115 Truxtun Ave Bakersfield, CA 93301

Charles H. Williams, Engineer Kern River Watermaster and Water Users PO Box 81435 Bakersfield, CA 93380	Kern Valley Indian Council PO Box 168 Kernville, CA 93238
Terry Middle Kerncrest Audubon Society Chapter PO Box 984 Ridgecrest, CA 93556	Anna West Kerns & West 475 Sansome St., Suite 570 San Francisco, CA 94111
Eddi Looy Kernville Chamber of Commerce PO Box 68 Kernville, CA 93238	Mark Mulkay Kern River Watermaster Group 501 Taft Hwy Bakersfield, CA 93240
Gene Parks Kern River Visitors Council 12512 Mountain Mesa Rd Lake Isabella, CA 93240	Lake Isabella Chamber of Commerce PO Box 567 Lake Isabella, CA 93240
Dave Lavers Lavers Ranch Star Rt. Box 1A Glennville, CA 93226	Robert & Susan Leiterman PO Box 3819 Lake Isabella, California 93240
Lower Slick Rock Improvement Association 118 Miner St. Bakersfield, CA 93305	Ara Marderosian PO Box 988 Weldon, CA 93283
James Mikesell PO Box 206 Onyx, CA 93255	Mono Lake Committee PO Box 29 Lee Vining, CA 93541
Duane Morden 215 Minner Ave Bakersfield, CA 93308	John Stallone Mountain River Adventures PO Box 858 Kernville, CA 93238
Randi McCormick 4121 Abbot Dr. Bakersfield, CA 93312	S.J. & Jessie Quinney Natural Resources Research Library Utah State University Logan, UT 84322
NOAA NEPA Coordinator Office of Program Planning & Integration 1315 East-West Highway Silver Spring, MD 20910	NOAA National Marine Fisheries Service 501 W Ocean Blvd. St 4200 Long Beach, CA 90802

Nancy Foster NOAA National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910	Jessie Howerton Porterville Sportsman Group 366 Baxley St. Porterville, CA 93257
W.C. Robertson 351 E Roberts Ln Bakersfield, CA 93238	Doug Rothert PO Box 844 Kernville, CA 93238
Robert Schlatter 15123 Cordary Ave Lawndale, CA 90260	Nate Sciacqua PO Box 1116 Weldon, CA 93283
Danielle Seward 2814 La Cresta Dr. Bakersfield, CA 93305	Joe Fontaine Sierra Club PO Box 307 Tehachapi, CA 93581
Carla Cloer Sierra Club Kern-Kaweah Chapter 182 E Reid Ave Porterville, CA 93257	Kent Duysen Sierra Forest Products PO Box 10060 Terra Bella, CA 93238
Thisda Small 4211 Country Club Dr. Bakersfield, CA 93306	Larry Duysen Society of American Foresters PO Box 10060 Terra Bella, CA 93270
Chuck Theroux 5813 Wilson Rd. Bakersfield, CA 93309	U.S. Army Corps of Engineers Regulatory Section 1325 J St. Sacramento, CA 95812
Ronald Jaeger, Director Bureau of Indian Affairs 2800 Cottage Way Sacramento, CA 95825	Alicin Leete U.S. Fish & Wildlife Service Suite B 2493 Portola Rd Ventura, CA 93003
Mary Bethke USDA Forest Service Sequoia National Forest 1839 S Newcomb St. Porterville, CA 93257	Matt Lechner USDA Forest Service Sequoia National Forest 1839 S Newcomb St. Porterville, CA 93257

Nancy Ruthenbeck USDA Forest Service Sequoia National Forest 1839 S Newcomb St. Porterville, CA 93257	Gary Valle Valley Programming Service, Inc. 23112 Baltar St. Canoga Park, CA 91304
Lonnie Wass Water Quality Control Board 1685 E St. Fresno, CA 93706	Clayton Youree 1708 Luke Ave Bakersfield, CA 93308
Robert Zwissler 1138 18th St. Manhattan Beach, CA 90266	

APPENDIX A

PROCESS PLAN AND SCHEDULE
KERN RIVER NO. 1 HYDROELECTRIC PROJECT NO. 1930

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 Entity	Milestone	Date	FERC Regulation
SCE	Filed NOI and PAD	5/5/2023	5.5, 5.6
FERC	Consultation Meetings with Tribes	6/4/2023	5.7
FERC	Issue Notice of Commencement of Proceeding and SD1	7/4/2023	5.8
FERC	Scoping and Site Visit	8/3/2023	5.8(b)(viii)
All Stakeholders	File Comments on PAD/SD1 and Study Requests	9/2/2023	5.9
FERC	Issue SD2 (if necessary)	10/17/2023	5.10
SCE	File Proposed Study Plan	10/17/2023	5.11(a)
All Stakeholders	Study Plan Meeting	11/16/2023	5.11(e)
All Stakeholders	File Comments on SCE's Proposed Study Plan Due	1/1***6***/2024	5.12
SCE	File Revised Study Plan	2/14/2024	5.13(a)
All Stakeholders	File Comments on SCE's Revised Study Plan	2/29/2024	5.13(b)
FERC	Issue Study Plan Determination	3/15/2024	5.13(c)
Mandatory Conditioning Agencies	File Any Study Disputes	4/4/2024	5.14(a)
Dispute Panel	Select Third Dispute Resolution Panel Member	4/19/2024	5.14(d)

Responsible Entity	Milestone	Date	FERC Regulation
Dispute Panel	Convene Dispute Resolution Panel	4/***24***/2024	5.14(d)(3)
SCE	File Comments on Study Disputes	4/29/2024	5.14(i)
Dispute Panel	Dispute Resolution Panel Technical Conference	5/***6***/2024	5.14(j)
Dispute Panel	Issue Dispute Resolution Panel Findings	5/24/2024	5.14(k)
FERC	Issue Director's Study Dispute Determination	6/13/2024	5.14(l)
SCE	Conduct First Study Season - typically, spring through fall, as necessary	2024	5.15(a)
SCE	File Initial Study Report	3/***17***/2025	5.15(c)(1)
All Stakeholders	Initial Study Report Meeting	3/***31***/2025	5.15(c)(2)
SCE	File Initial Study Report Meeting Summary	4/14/2025	5.15(c)(3)
All Stakeholders	File Disagreements/Requests to Amend Study Plan	5/14/2025	5.15(c)(4)
All Stakeholders	File Responses to Disagreements/Amendment Requests	6/13/2025	5.15(c)(5)
FERC	Issue Director's Determination on Disagreements/Amendments	7/***14***/2025	5.15(c)(6)
SCE	Conduct Second Study Season - typically, spring through fall, as necessary	2025	5.15(a)
SCE	File Updated Study Report	3/***16***/2026	5.15(f)
All Stakeholders	Updated Study Report Meeting	3/30/2026	5.15(f)
SCE	File Updated Study Report Meeting Summary	4/14/2026	5.15(f)
All Stakeholders	File Disagreements/Requests to Amend Study Plan	5/14/2026	5.15(f)
All Stakeholders	File Responses to Disagreements/Amendment Requests	6/***15***/2026	5.15(f)

Responsible Entity	Milestone	Date	FERC Regulation
FERC	Issue Director's Determination on Disagreements/Amendments	7/13/2026	5.15(f)
SCE	File Preliminary Licensing Proposal (or Draft License Application)	***1/2/2026***	5.16(a)-(c)
All Stakeholders	File Comments on Preliminary Licensing Proposal (or Draft License Application)	***4/1/2026***	5.16€
SCE	File Final License Application	***6/1/2026***	5.17
SCE	Issue Public Notice of Final License Application Filing	***6/15/2026***	5.17(d)(2)