

Wayne Allen
Secretary Bose

September 1, 2023

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Mr. Wayne Allen
Southern California Edison
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Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426
Via e-filing

**Kern River No. 1 Hydroelectric Project
Federal Energy Regulatory Commission Project No. 1930
Kern County
Kern River**

**STUDY REQUESTS AND COMMENTS ON THE PRE-APPLICATION DOCUMENT
COMMENTS AND SCOPING DOCUMENT 1**

Dear Mr. Allen and Secretary Bose:

State Water Resources Control Board (State Water Board) staff hereby submits the enclosed comments and study request pertaining to the Pre-Application Document (PAD) filed by Southern California Edison (SCE) for the Kern River No. 1 Hydroelectric Project (Project), also referred to as Federal Energy Regulatory Commission (FERC) Project No. 1930. The comments and study request are provided in two attachments: *Attachment A: Comments on Pre-Application Document for Kern River No. 1 Hydroelectric Project* and *Attachment B: Study Plan Request for Kern River No. 1 Hydroelectric Project*. State Water Board staff have no comments on FERC's Scoping Document 1 for the Project.

SCE owns and operates the Project. The Project was originally licensed by FERC in 1998 on a 30-year term license that expires in 2028.

On May 5, 2023, SCE filed its PAD with FERC for relicensing of the Project. On June 29, 2023, FERC issued notice of SCE's PAD filing and Scoping Document 1. On August 3, 2023, State Water Board staff attended an in-person public meeting hosted by FERC to discuss the Project relicensing and information contained in the PAD. The public meeting began a 30-day comment period in which interested parties could submit comments on the Project's PAD and request additional studies as well as comment on FERC's Scoping Document.

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The State Water Board's study plan request discusses the six criteria specified by FERC in the Code of Federal Regulations, title 18, section 5.9(b).

If you have questions regarding this letter please contact Garrett Long, Project Manager, by email at garrett.long@waterboards.ca.gov. Written correspondence should be directed to:

State Water Resources Control Board
Division of Water Rights – Water Quality Certification Program
Attn: Garrett Long
P.O. Box 2000
Sacramento, CA 95812-2000

Sincerely,

Garrett Long

Garrett Long – Water Resources Control Engineer
Water Quality Certification Program
Division of Water Rights

Attachments:

Attachment A: Comments on Pre-Application Document for Kern River No. 1
Hydroelectric Project

Attachment B: Study Plan Request for Kern River No. 1 Hydroelectric Project

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Ms. Kimberly D. Bose,
Secretary Federal Energy Regulatory Commission
Via e-filing to FERC Docket P-1930

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ATTACHMENT A

COMMENTS ON PRE-APPLICATION DOCUMENT FOR KERN RIVER NO. 1 HYDROELECTRIC PROJECT

State Water Resources Control Board (State Water Board) staff are providing the following comments on Southern California Edison's (SCE) Pre-Application Document (PAD) for relicensing the Kern River No. 1 Hydroelectric Project (Project):

1. Section 401 of the Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit for an activity that may result in any discharge to navigable waters, to obtain certification from the State that the discharge will comply with the applicable water quality requirements, including the requirements of section 303 of the Clean Water Act (33 U.S.C. § 1313) for water quality standards and implementation plans. Clean Water Act section 401 directs that certifications shall prescribe effluent limitations and other conditions necessary to ensure compliance with the Clean Water Act and with any other appropriate requirements of state law, such as the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.). Conditions of certification shall become a condition of any federal license or permit subject to certification. The Project will result in a discharge to navigable waters and must obtain certification from the State Water Board as part of relicensing for continued operations.

A certification issued by the State Water Board for the Project must ensure compliance with the water quality standards in the Central Valley Regional Water Quality Control Board's Water Quality Control Plan for the Lake Tulare Basin (Tulare Lake Basin Plan) and applicable state water quality control plans. Water quality control plans designate the beneficial uses of water that are to be protected, water quality objectives for the reasonable protection of the beneficial uses and the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Cal. Wat. Code, §§ 13241, 13050, subds. (h), (j).) The beneficial uses, together with the water quality objectives contained in the water quality control plans, and applicable antidegradation requirements, constitute California's water quality standards for purposes of the Clean Water Act. In issuing water quality certification for a project, the State Water Board must ensure consistency with the designated beneficial uses of waters affected by the Project, the water quality objectives developed to protect those uses, and antidegradation requirements. (*PUD No. 1 of Jefferson County v. Washington Dept. of Ecology* (1994) 511 U.S. 700, 714-719.)

The Project facilities are located on the Kern River above Kern 1 Powerhouse and below the Borel Hydroelectric Project, downstream of Lake Isabella. The Tulare Lake Basin Plan sets forth water quality standards for waterbodies in the region, including Project-related waters of the Kern River. Beneficial uses established by the Tulare Lake Basin Plan for Project waters relevant to water quality include: hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife

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habitat; and rare, threatened, or endangered species habitat. In addition to beneficial uses, the Tulare Lake Basin Plan includes narrative and numeric surface water quality objectives that aim to preserve and protect the beneficial uses listed above.

The State of California's Antidegradation Policy (State Water Board Resolution 68-16; see also 40 C.F.R. § 131.12), was developed to protect watersheds, including the Project watershed. Under the Antidegradation Policy, whenever the existing water quality is better than the water quality established in applicable water quality control plans and policies (both narrative and numerical), such existing quality must be maintained unless appropriate findings are made under the policy.

Information collected through the implementation of study plans in the Federal Energy Regulatory Commission (FERC) relicensing process will be used by FERC to develop license conditions and fulfill its obligations under the National Environmental Policy Act (NEPA) and by other agencies that must take permitting actions during relicensing proceedings. Study plan information will assist the State Water Board in developing CEQA and water quality certification conditions to ensure compliance with the Clean Water Act and appropriate requirements of state law.

2. Section 4.3 Draft Technical Study Plans. State Water Board staff supports SCE's intended process to work collaboratively with State Water Board staff and other relicensing participants to refine studies. When possible, working collaboratively with all relicensing participants often allows for expedited resolution of issues.
3. Compliance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) is required as part of the water quality certification process. CEQA requires the lead agency to evaluate a project's potential impacts to environmental resources as well as identify mitigation measures and alternatives to reduce project impacts. CEQA also requires public input on identified impacts and mitigation measures. CEQA documentation must analyze and evaluate the project's impacts to all relevant resources, including aquatic biological resources, special status species, water quality standards, and water quality control plans. Information from studies and data gathering during FERC relicensing informs CEQA document development.

CEQA Guidelines define the lead agency as "the public agency which has the principal responsibility for carrying out or approving a project." (Cal. Code Regs.,

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tit. 14, § 15367.) It is State Water Board staff's understanding that the State Water Board will act as the CEQA lead agency for the Project relicensing. State Water Board staff request SCE confirm in writing its understanding on whether the State Water Board will be the CEQA lead agency.

4. Below, State Water Board staff are providing comments on SCE's proposed WQ-2 Water Quality/Temperature Technical Study Plan:

- State Water Board staff request the Water Quality/Temperature Technical Study Plan include an additional data collection site below Democrat Dam but above the Democrat Dam sandbox outflow. The Democrat Dam sandbox outflow provides required minimum instream flows when the dam is not spilling and so sampling in this part of the reach will shed light on potential impacts to beneficial uses from reservoir operations and facilities.
- State Water Board staff request water column metals sampling, including but not limited to mercury, methylmercury, and arsenic, of the Project impoundment be included in the Water Quality/Temperature Technical Study Plans.

Lake Isabella, upstream of the Project, is listed in the California 2020-2022 Integrated 303(d) List/305(b) Report for pH, dissolved oxygen, and methylmercury. Any oxygen depletion in the Project impoundment may lead to increased methylation of mercury due to anoxic conditions. Additionally, there is history of gold mining in the Kern River watershed with limited metals and other mining related water quality data available. Previous studies conducted during the Project's relicensing in 1994 indicated elevated arsenic levels above Tulare Lake Basin Plan standards.

Given the history of the watershed and minimal existing data on mercury concentrations, additional information is needed to address water quality data gaps for the Project, establish baseline conditions, inform fish tissue data (requested below in Attachment B), and inform State Water Board staff's assessment of Project impacts to water quality.

- The *Water Quality/Temperature Technical Study Plan* is proposed for one year, with some comparison to older limited water quality data. State Water Board staff believe one year of data collection is not adequate to evaluate the Project's potential impacts as its operations could span a 50-year term. One year of data collection may not provide sufficient water quality information for

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various water year types. State Water Board staff request the above study continues data collection for a minimum of two years.

ATTACHMENT B

STUDY PLAN REQUEST FOR KERN RIVER NO. 1 HYDROELECTRIC PROJECT

State Water Resources Control Board (State Water Board) staff requests a Methylmercury Fish Tissue Sampling Study be conducted as part of relicensing Southern California Edison's (SCE) Kern River No. 1 Hydroelectric Project (Project).

1. *Describe the goals and objectives of each study proposal and the information to be obtained (18 C.F.R. § 5.9(b)(1)):*

The goal of a methylmercury Methylmercury Fish Tissue Sampling Study would be to determine whether the Project may adversely affect beneficial uses in the Kern River watershed by providing conditions that increase the methylation of mercury.

SCE's Pre-Application Document (PAD) Section 3.4.3 states, "Existing information sources indicate that the physical and water chemistry conditions in the bypass reach associated with the Project are of high quality and generally conform to regulatory water quality objectives and standards. No persistent, widespread water quality issues were found." Given that the data supporting this claim was collected over thirteen years ago, and mercury and some metals data collected during previous relicensing efforts twenty-nine years ago, additional water quality sampling and methylmercury fish tissues collections are warranted. When coupled with additional mercury water quality monitoring (requested in State Water Board's Attachment A, Comment 4), methylmercury fish tissue collections would inform changes in methylmercury concentrations associated with Project impoundment operations as opposed to inflows from Lake Isabella and may inform conditions of a water quality certification.

2. *If applicable, explain the relevant resource management goals of the agency with jurisdiction over the resource to be studied (18 C.F.R. § 5.9(b)(2)):*

The State Water Board has broad authority under the Clean Water Act (33 U.S.C. §§ 1251-1387), the California Constitution, and state statutes and regulations to restore and maintain the chemical, physical and biological integrity of the state's waters, and to regulate the diversion and use of water through the water right priority system in accordance with the State Water Board's reasonable use and public trust responsibilities. The Porter-Cologne Water Quality Control Act (Cal. Wat. Code, § 13000 et seq.) establishes a comprehensive program to protect water quality and the beneficial uses of water and charges the State Water Board and nine regional water quality control boards with protecting water quality in California.

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Throughout the Federal Energy Regulatory Commission relicensing process, the State Water Board maintains independent regulatory authority to condition Project operations to protect water quality and beneficial uses consistent with the Clean Water Act, applicable water quality control plans, State Water Board regulations, and any other applicable state laws. With respect to mercury concentrations, the Project has the potential to impact beneficial uses related to the fisheries and recreational uses in the Kern River watershed. Requiring mercury fish tissue sampling as part of the relicensing effort for the Project is appropriate as it will ensure up to date fish tissue mercury level data and enable State Water Board staff to more accurately assess potential impacts to the recreational fishery and associated beneficial uses of the waters of the state within the Project area.

3. *Describe existing information concerning the subject of the study proposal, and the need for additional information (18 C.F.R. § 5.9(b)(4)):*

PAD section 3.4 references limited twenty-nine-year-old data collected in 1994 to indicate that Project effects on the methylation of mercury are likely not adversely impacting water resources. State Water Board staff feel a more recent and robust study that follows standard fish tissue mercury protocols and represents the range of fish that could be caught and/or consumed by the public, coupled with concurrent water quality data related to mercury, will better ensure the Project is protective of human health and is compliant with water quality standards.

The State Water Board is responsible for the protection of water quality. In relation to the Project, the State Water Board is the state agency with federal Clean Water Act section 401 water quality certification authority and through issuance of a certification must verify that Project operations do not violate a water quality standard or other applicable state water quality requirements. Additional fish tissue mercury information may inform future conditions of a water quality certification.

4. *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 (18 C.F.R. § 5.9(b)(5)):*

Mercury Fish Tissue sampling is frequently conducted in reservoirs with resident fish and/or sport fishing activities to help inform regulatory decisions regarding potential impacts to beneficial uses associated with the fishery and recreational uses, including fish consumption. The Project area has an active fishing

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community that make use of Project facilities and fish in and around the Project impoundment. Any oxygen depletion in the Project impoundment may lead to increased methylation of mercury due to anoxic conditions. Democrat Dam impounds up to 247 acre-feet of water which could grow stagnant, hot, and anoxic in dry water years.

Lake Isabella, upstream of the Project, is listed in the California 2020-2022 Integrated 303(d) List/305(b) Report for pH, dissolved oxygen, and methylmercury. Additionally, there is a history of gold mining in the Kern River watershed with limited metals and other mining related water quality data available. Previous studies conducted during the Project's relicensing in 1994 included measurements indicating elevated arsenic levels above Tulare Lake Basin Plan standards.

When coupled with additional mercury water quality monitoring (requested in State Water Board's Attachment A, Comment 4), methylmercury fish tissue collections would inform changes in methylmercury concentrations associated with Project impoundment operations as opposed to inflows from Lake Isabella and may inform conditions of a water quality certification.

5. *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 (18 C.F.R. § 5.9(b)(6)):*

Mercury Fish Tissue sampling is frequently conducted in reservoirs with resident fish and/or sport fishing activities to help inform regulatory decisions regarding potential impacts to beneficial uses associated with the fishery and recreational uses, including fish consumption. As SCE is pursuing a new license to operate the Project for a termed period of up to 50 years, requiring current fish tissue sample is an appropriate data collection event to inform Project relicensing.

6. *Describe considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs (18 C.F.R. § 5.9(b)(7)):*

The Mercury Fish Tissue Sampling Study should run for two consecutive water-years and should include data collection described in the goals and objectives section. Based upon previous relicensing processes in California that have conducted similar fish tissue studies, State Water Board staff estimate the cost to

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be between \$10,000 and \$15,000 with cost dependent on collaborative development of study specifics and methodologies.