

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426
October 26, 2022

OFFICE OF ENERGY PROJECTS

Project No. 1389-059 – California
Rush Creek Hydroelectric Project
Southern California Edison Company

VIA FERC Service

Mr. Matthew Woodhall
Southern California Edison Company
1515 Walnut Grove Avenue
Rosemead, CA 91770

Reference: Study Plan Determination

Mr. Woodhall:

Pursuant to 18 C.F.R. § 5.13(c) of the Commission’s regulations, this letter contains the study plan determination for the Rush Creek Hydroelectric Project No. 1389 (Rush Creek Project or project). The project is located on Rush Creek in Mono County, California and occupies 688 acres of federal land managed by the U.S. Forest Service (Forest Service). The determination is based on the study criteria set forth in section 5.9(b) of the Commission’s regulations, applicable law, Commission policy and practice, and the record of information for the project.

Background

On May 26, 2022, Southern California Edison (SCE) filed a Proposed Study Plan (PSP) that included 15 studies in support of its intent to relicense the Rush Creek Project. The PSP included studies on project facilities and aquatic, terrestrial, recreational, cultural, and land resources.

SCE held an initial study plan meeting on the PSP on June 16, 2022. Comments on the PSP were filed by the Forest Service, California State Water Resources Control Board (Water Board), East Shore Silver Lake Improvement Association, and the June Lake Regional Planning Advisory Committee (filed on behalf of themselves, Friends of the Inyo, American Rivers, and the California Sportfishing Protection Alliance).

SCE filed a Revised Study Plan (RSP) on September 23, 2022. The RSP includes revised versions of the original 15 studies and no additional studies. Comments on the

RSP were filed by the East Shore Silver Lake Improvement Association (ESSLIA) and the Water Board on October 11, 2022, and the Forest Service on October 12, 2022. The California Department of Fish and Wildlife (California DFW) filed comments on October 13, 2022. SCE filed reply comments, including a revised TERR-2 Wildlife Resources Technical Study Plan, on October 19, 2022.

General Comments

Some of the comments on the RSP do not directly address the study plans. For example, some comments request that SCE provide additional information, present information differently, or recommend protection, mitigation, and enhancement measures, including potential modifications to existing facilities. This determination does not address such comments, but only addresses comments specific to the merits of the proposed studies submitted pursuant to section 5.13 of the Commission's regulations and comments received thereon. Additionally, this determination does not address requests for study modifications already included in the RSP (e.g., providing data to relevant agencies).

Study Plan Determination

SCE's RSP is approved, with the staff-recommended modifications discussed in [Appendix B](#). As indicated in [Appendix A](#), of the 15 studies proposed, 14 are approved as filed, and 1 is approved with staff-recommended modifications. Of the three new studies requested by stakeholders, one is required with modifications. Additionally, SCE is required to conduct a staff-recommended *Environmental Justice Study*.

The specific modifications and bases for modifying the RSP are discussed in [Appendix B](#). Commission staff reviewed all comments and considered all study plan criteria in section 5.9 of the Commission's regulations. However, only the criteria particularly relevant to the determination are referenced in [Appendix B](#).

Studies for which no issues were raised in comments on the RSP are not discussed in this determination, except for those addressed independently by Commission staff in [Appendix B](#). Unless otherwise indicated, all components of the approved studies not modified in this determination must be completed as described in SCE's RSP.

Nothing in this study plan determination is intended, in any way, to limit any agency's proper exercise of its independent statutory authority to require additional studies. In addition, SCE may choose to conduct any study not specifically required herein that they feel would add pertinent information to the record.

If you have any questions, please contact Kelly Wolcott, the Commission's relicensing coordinator for the project, at (202) 502-6480 or kelly.wolcott@ferc.gov.

Sincerely,

for
Terry L. Turpin
Director
Office of Energy Projects

Enclosures: Appendix A – Summary of Determinations on Proposed and Requested
Studies
Appendix B – Staff’s Recommendations on Proposed and Requested
Studies

**APPENDIX A: SUMMARY OF DETERMINATIONS
ON PROPOSED AND REQUESTED STUDIES**

Rush Creek Hydroelectric Project P-1389-059

Study	Recommending Entity	Approved	Approved with Modifications	Not Required
SCE's Revised Study Plan				
Study AQ-1: Instream Flow	SCE, Forest Service	X		
Study AQ-2: Hydrology	SCE,	X		
Study AQ-3: Water Temperature	SCE, Forest Service	X		
Study AQ-4: Water Quality	SCE, Forest Service, Water Board	X		
Study AQ-5: Geomorphology	SCE, Forest Service	X		
Study AQ-6: Fish Populations and Barriers	SCE, Forest Service	X		
Study AQ-7; Special-status Amphibians	SCE, Forest Service	X		
Study TERR-1: Botanical	SCE, Forest Service	X		
Study TERR-2: Wildlife	SCE, California DFW		X	
Study REC-1: Recreation	SCE	X		
Study TRI-1: Tribal	SCE	X		
Study CUL-1: Built Environment	SCE	X		
Study CUL-2: Archaeology	SCE	X		

Study	Recommending Entity	Approved	Approved with Modifications	Not Required
Study LAND-1: Aesthetics	SCE	X		
Study LAND-2: Noise	SCE	X		
New Studies				
Environmental Justice	FERC	X		
Socioeconomic Analysis	ESSLIA			X
Project Decommissioning	Forest Service		X	
Sediment Accretion at Silver Lake Inlet	ESSLIA			X

APPENDIX B: STAFF'S RECOMMENDATIONS ON PROPOSED AND REQUESTED STUDIES

Rush Creek Hydroelectric Project P-1389-059

I. GENERAL ISSUES

This section addresses requests common to multiple studies.

Number of Study Seasons

Background

In the RSP, SCE proposes to conduct multiple studies over a single study season, including AQ-3 *Water Temperature*, AQ-4 *Water Quality*, AQ-6 *Fish Populations and Barriers*, AQ-7 *Special-Status Amphibians*, and TERR-2 *Wildlife Resources*.

Comments

The Water Board requests that SCE conduct two years of water quality monitoring (AQ-4) to allow for an analysis of project effects in different water year types and avoid potential anomalous conditions leading to project effects being misrepresented. Similarly, California DFW requests that SCE conduct two years of water temperature monitoring (AQ-3), fish sampling (AQ-6), Sierra Nevada Yellow Legged Frog (SNYLF) and Yosemite toad surveys (AQ-7), and reconnaissance surveys for wildlife and bats (TERR-2). California DFW states that conducting these studies for only one year would not provide an adequate understanding of interannual variability or species presence and habitat use.

In response to the Water Board's request, SCE notes that AQ-4 includes a provision to conduct a second year of water quality monitoring for any parameters that exceed the objectives/criteria identified in the Basin Plan during the first year of monitoring. In response to California DFW's request for AQ-3, SCE states that, although the RSP only includes one year of data collection, it has committed to conducting two years of water temperature monitoring, the first year of which began on May 15, 2022. Regarding the request for AQ-6, AQ-7, and TERR-2, SCE states that conducting one year of these studies is sufficient to document fish species composition, distribution, and relative abundance; potential habitat for SNYLF and Yosemite toad; wildlife use; and bat roost locations.

Discussion and Staff Recommendation

California DFW does not provide its rationale for why a knowledge of interannual variability is needed to inform an analysis of project effects, nor does it explain why a one-year study would not provide an adequate understanding of species presence and habitat use [section 5.9(b)(6)]. As for the Water Board's concerns regarding potential anomalous conditions, section 5.15(c) and (d) of the Commission's regulations accounts for the need to modify ongoing studies after the first year if it is determined that they were conducted under anomalous environmental conditions. In addition, section 5.15(e) accounts for the potential need for new studies after the first year if the goals and objectives of any approved study could not be met with the approved study methodology. Commission staff expect that conducting a single year of these studies, as proposed by SCE, will provide sufficient information regarding the potential effects of the project on the associated resource. Therefore, we do not recommend an additional study season for these studies at this point. However, regarding the bat and wildlife surveys (TERR-2), we do recommend that SCE consult with California DFW on the specific timing of the surveys during the study season to help ensure that any species that are present are detected.

Use of Motorized Vessels

Background

In the RSP, SCE proposes to use a motorized vessel to conduct water quality (AQ-4) and fish population (AQ-6) sampling in Gem Lake, which is located within the Ansel Adams Wilderness Area (Wilderness Area). SCE notes that if any required authorization from Forest Service to use a motorized vessel on Gem Lake is not obtained, SCE would not be able to conduct the sampling in Gem Lake.

Comments

While the Forest Service has not specifically requested a modification to the proposed studies, it states that it has evaluated SCE's proposal to utilize motorized boats in the Wilderness Area and has determined that there are alternative, non-motorized methods (e.g., float tubes) for collecting this information.

SCE states that there are safety concerns with utilizing non-motorized methods for conducting the studies due to the remote location of the project, the likely weight and bulkiness of sampling equipment, the potential for wind and weather to develop quickly, and the potential for entanglement if not working from a stable, appropriately sized vessel. In addition, SCE notes that it has historically used motorized vessels on Gem Lake for routine operation and maintenance, including implementing Forest Service's 4(e) conditions for recreation and wilderness management, that allow a motor barge to be

used on an as-needed basis. SCE also states that the need for motorized vessels on Gem Lake is typically included in SCE's Annual Operating Plan and discussed with the Forest Service in an Annual Consultation Meeting. SCE notes that the two proposed studies that have components to be conducted in Gem Lake (AQ-4 and AQ-6) have been coordinated such that a motorized vessel would only be used approximately six partial days during the field season.

Discussion and Staff Recommendation

Using a motorized vessel instead of non-motorized methods to conduct the components of these studies on Gem Lake would be expected to increase efficiency and minimize safety concerns. Therefore, we do not recommend that the RSP be modified to specify the use of non-motorized methods on Gem Lake. However, we recognize that any use of a motorized vessel on Gem Lake will require prior authorization from the Forest Service. Therefore, SCE must either obtain the required authorization from the Forest Service or implement the components of the study on Gem Lake using alternative methods identified by the Forest Service.

II. REQUIRED STUDIES

Study TERR-2: Wildlife Resources

Applicant's Proposed Study

The proposed study would primarily consist of two phases: (1) a desktop habitat assessment overlaying habitat with project facilities; and (2) field surveys for raptor nests and wildlife species occurring in the project area. The desktop habitat suitability assessment would include a literature review and consultation with resource agencies to identify and map known species occurrences and their breeding habitat (e.g., nesting) within the study area, including along the helicopter flight path. The habitat assessment would use aerial imagery and Forest Service vegetation alliances¹ cross referenced with species-specific habitat characteristics and occurrences to map and select target areas for field surveys.

The study area would include a 1-mile buffer around the project boundary. Survey methods would include both zigzag and linear transects depending on the survey area and terrain. Zigzag transects cover more ground and work well in larger habitat areas (e.g., mixed conifer forest) while linear transects work well in narrow habitats (e.g., riparian).

¹ An alliance is a category of vegetation classification that describes repeating patterns of plants across a landscape.

Species would be recorded as present if they are observed, species-specific vocalizations are heard, or if diagnostic field signs are found (e.g., scat, tracks, pellets).

Raptor nesting surveys would be conducted twice during the appropriate nesting season, based on consultation with resource agencies and local raptor experts, with each survey spaced at least 30 days apart (Pagel 1991 and Pagel et al. 2010). Surveys would not be conducted during the incubation period when raptors are more sensitive to disturbance. Surveyors would use existing trails and observation points to survey suitable raptor habitat along the helicopter flight paths, and would be conducted by a qualified biologist with experience in conducting raptor nest surveys. In addition, SCE would document the configuration of transmission line and power line poles and evaluate their consistency with Avian Power Line Interaction Committee (APLIC) guidelines (APLIC, 2012) for any project poles not previously evaluated as part of SCE's corporate-wide Avian Protection Program. SCE would document any past avian electrocutions and mortalities on project transmission lines and power lines based on SCE and resource agency consultation.

The study also includes provisions for visual roost surveys at project facilities identified as potentially supporting roosting special-status species of bat. The assessment would be conducted (July–September) during the end of the maternal roosting period when colonies may still be present, but after the critical sensitive period (i.e., parturition and early nursing period). Biologists would search the project facilities for signs of bat species (e.g., staining on walls, guano piles). If live bats are observed, biologists would enter to only photograph the roost. The species present, roost status (day roost/maternal), and number of adults and/or juveniles would be determined from review of the photograph. If live bats are not observed, but bat roost sign is present, spotlights and high-powered flashlights would be used in combination with binoculars for more detailed examination of the potential roost sites. To prevent the introduction of *Pseudogymnoascus destructans*, a fungal pathogen causing white-nose syndrome (WNS), methods described in the National White-nose Syndrome Decontamination Protocol (White-nose Syndrome Response Team, 2018) would be implemented to decontaminate clothing and equipment prior to entering potential roosts. If bat roosts are present but the species cannot be determined visually, then species would be determined using guano DNA sampling (if suitable fresh guano is available).

Comments on the Study

Use of Project Area by Bats

California DFW recommends that the study plan specify the types of facilities that will be evaluated for bat habitat (e.g., bridges, buildings, dam structures, tunnels, rip-rap, culverts). After SCE conducts the preliminary visual assessment of project facilities to determine the potential for facilities to support bat roosts, California DFW requests that

SCE provide a summary of: (1) all the project facilities surveyed; (2) survey methodology; (3) photos (4) a description of features that provide roosting habitat; (5) a description of the surrounding environmental conditions; and, (6) a detailed explanation of any determination that no bat habitat is present on or adjacent to a project facility. In its response to California DFW's comments on the RSP, SCE filed a revised TERR-2 Wildlife study plan that incorporates the above requested provisions requested by California DFW.

If suitable habitat and signs of bats are observed, California DFW recommends that SCE conduct focused surveys to determine approximate size of the colony(s) and species present. California DFW notes that the surveys should be conducted by a qualified bat biologist, using survey methods such as evening exit counts, nighttime inspections, and the use of an Anabat detector. Further, California DFW comments that all bat species, not just special-status species, that could potentially be utilizing (e.g., day roost, night roost, maternity roost) the project facilities and area (e.g., foraging) need to be identified.

California DFW states that not all bat species can be identified with just a visual assessment and recommends that acoustic monitoring also be implemented to conduct a complete inventory of the bat species using the project area, including what types of roosts the project area provides. Finally, California DFW comments that they currently have a field program swabbing bats at multiple localities, including the project area, to monitor for the fungus spreading. California DFW requests that SCE notify them if roosting bats are detected in early spring in the facilities so California DFW can conduct swab sampling.

In SCE's revised TERR-2 Wildlife study plan, in the event that fresh guano is not available for DNA testing, acoustic detectors would be placed close to the roost emergence points and sonograms would be analyzed by a qualified biologist to determine species present. Further, SCE now proposes to conduct acoustic surveys during the reproductive season at flight corridors between potential roosting habitat and foraging habitat, as well as any additional locations where bats were detected during roost surveys but were not identified to species. Acoustic sampling would be conducted using full-spectrum Wildlife Acoustics SM4BAT-FS detector units (acoustic units). Sonogram files would be processed using Kaleidoscope Pro 4.5.5 (Wildlife Acoustics), which auto-classifies each sonogram into tentative species determinations with 70 to 80 percent accuracy. The Anabat Insight software program would then be used to further classify files and reduce the amount of time required to manually inspect sonograms. A qualified bat biologist would review the auto-classified sonograms to confirm species designations. The acoustic units would be operated at the selected sites for five nights from sunset until sunrise. SCE's revised plan also includes a proposal for a seasonal use survey, which would include additional acoustic sampling in the fall before onset of winter snows (i.e., late September/early October) at those locations where active roosts were identified

and/or within flight corridors between roost sites and potential foraging habitat to determine seasonal patterns of use. SCE would then develop a GIS map of special-status bat roosts and overlay information on project facilities. SCE also now proposes to notify California DFW so that they can conduct WNS swab sampling.

Discussion and Staff Recommendation

Use of Project Area by Bats

Project-related construction, operation, and maintenance could potentially affect bats using project facilities. While SCE does not explicitly state how many surveys it intends to conduct, the description in the revised TERR-2 study plan suggests that each project facility will be surveyed one time. Visual surveys could supplement counts achieved through photographing the colony and could provide a failsafe in the event of a blurry photograph, equipment failure, or inability to see all individuals in a photo. The proposed acoustic surveys would also assist in species identification and gage activity around project facilities (e.g., if bats are also using project facilities for foraging opportunities, for example around exterior lights). The PAD describes 15 bat species (12 common species and 3 special-status species) known to occur or may occur in the project area, either as residents or seasonal migrants. These species vary in the types of habitats and their use in the project area, including roosting, foraging, migration, and breeding. Determining how bats utilize the project area (e.g. roosting, foraging, breeding, migration) would also aid our environmental analysis of the potential effects of construction, operation, and maintenance of the project on bats, such as habitat loss, habitat degradation, light, noise, and human disturbance. Therefore, we recommend an inventory of bat use of the project area for all species as now proposed by SCE and as modified by the California DFW recommendations noted above (in the “Comments on the Study” subsection), including acoustic monitoring and visual survey techniques (e.g., evening exit counts, nighttime inspections), and the proposed DNA sampling.

SCE proposes to provide summary tables and maps, as appropriate, in their Technical Study Reports, and agrees to provide study data to resource agencies and interested stakeholders in an Excel spreadsheet, upon request. We expect the Technical Study Reports to also be made available upon request, unless such data might contain sensitive information (e.g. photos). Any such sensitive information would be expected to be filed the Commission as privileged information, and filed separately from a public version of the Technical Study Reports.

With the increased level of effort to include visual surveys, which may require more than one biologist, we estimate the total cost for all of these recommendations would be about \$20,000.

Surveys for ESA-listed Species

The study plan does not clearly indicate that the initial study report will identify the methodologies that were used to conduct the surveys. This information is needed to assess the survey results. Therefore, we recommend that the initial study report provide the following information regarding the survey methods used for this study for each listed species potentially occurring in the project area.

- Describe the number of survey locations, points, and/or transects to be conducted within suitable breeding habitat, including if applicable, the aggregate length of surveyed transects.
- Provide, for each survey location, the duration of time that surveys are conducted, the frequency and duration of playbacks, and the total survey effort per species (e.g., total time per survey replicate).
- Describe survey methods in sufficient detail for any special-status species identified as potentially affected by continued and proposed operation of the project, including species-specific methodology, number of survey locations, survey effort (e.g., time, area), information collected (e.g., signs, habitat data), etc.

Additionally, we accessed the U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPaC) database on October 14, 2022, to request an updated list of threatened and endangered species. The endangered Sierra Nevada red fox may occur in the project area but was not listed as a federally protected species in the PAD. The IPaC list also includes the proposed threatened North American wolverine, which was similarly not listed in the PAD. We recommend that these species be included in the list of special-status species consulted on and surveyed as part of this study.

We estimate the total cost of the recommendations described above would be about \$5,000.

III. NEW STUDY RECOMMENDED BY STAFF

Environmental Justice Study

Commission staff have identified information needed to assess project effects that is not included in the PAD or proposed in SCE's RSP. As required in section 5.9(b)(1)-(7) of the Commission's regulations, we have addressed the required criteria in the study request that follows.

Goals and Objectives

Section 5.9(b)(1) – Describe the goals and objectives of each study proposal and the information to be obtained.

The study has five objectives: (1) to identify the presence of environmental justice communities that may be affected by the relicensing of the Rush Creek Project and identify outreach strategies to engage the identified environmental justice communities in the relicensing process, if present; (2) to identify the presence of non-English speaking populations that may be affected by the project and identify outreach strategies to engage non-English speaking populations in the relicensing process, if present; (3) to discuss effects of relicensing the project on any identified environmental justice communities and identify any effects that are disproportionately high and adverse; (4) to identify mitigation measures to avoid or minimize project effects on environmental-justice communities; and (5) to identify sensitive receptor locations within the project area and identify potential effects and measures taken to avoid or minimize the effects to such locations, if they are present.

Relevant Resource Management Goals and Public Interest Considerations

Section 5.9(b)(2) – If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied.

Not applicable.

Section 5.9(b)(3) – If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study.

Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*,² and Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*,³ as amended, requires federal agencies to consider if impacts on human health or the environment would be disproportionately high and adverse for minority and low-income populations (i.e., environmental justice communities) in the surrounding community resulting from the programs, policies, or activities of federal agencies. If environmental justice communities do exist near the Rush Creek Project, Commission staff will need to assess potential effects from relicensing the project on those communities.

² 86 Fed. Reg. 7, 619-7, 633 (January 27, 2021).

³ 59 Fed. Reg. 7, 629-7, 633 (February 16, 1994).

Further, Sections 4(e) and 10(a) of the Federal Power Act require the Commission to give equal consideration to all uses of the waterway on which a project is located, and what conditions should be placed on any license that may be issued. In making its license decision, the Commission must equally consider the environmental, recreational, fish and wildlife, and other non-developmental values of the project, as well as power and developmental values.

Existing Information and Need for Additional Information

Section 5.9(b)(4) – Describe existing information concerning the subject of the study proposal, and the need for additional information

Although SCE's PAD provides an overview of socioeconomic resources near the project, it provides no information regarding the presence or absence of environmental justice communities, or information that would assist our analysis of any project effects to those communities, if present. Moreover, none of the studies proposed by SCE would provide the aforementioned information.

The information necessary to conduct an identification of environmental justice communities near the project is available through the U.S. Census Bureau's American Community Survey (Census 2020); however, such information must be aggregated and compared in order to make determinations about the presence of environmental justice communities within the project area. The nature of effects of the project on any communities present would need to be determined through consultation with the communities, and are dependent on the applicant's relicensing proposal.

Project Nexus

Section 5.9(b)(5) – Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements.

Continued operation and maintenance of the Rush Creek Project has the potential to affect human health or the environment in environmental justice communities. Examples of resource impacts may include, but are not necessarily limited to, project-related effects on: erosion or sedimentation of private properties; groundwater or other drinking water sources; subsistence fishing, hunting, or plant gathering; access for recreation; housing or industries of importance to environmental justice communities; and operation-related effects on air quality, noise, and traffic.

Proposed Methodology

Section 5.9(b)(6) – Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate field season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge.

Below, we provide the methodology that Commission staff has adopted for collecting environmental justice data for hydroelectric projects. This methodology has been successfully employed on a number of projects in the licensing process and is consistent with guidance from the Environmental Protection Agency’s *Promising Practices for Environmental Justice Methodologies in NEPA Reviews* (2016). Please prepare a study report that provides the following:

- (a) A table of racial, ethnic, and poverty statistics for each state, county, and census block group within the geographic scope of analysis. For the project, the geographic scope of analysis is all areas within 1 mile of the project boundary. The table should include the following information from the U.S. Census Bureau’s most recently available *American Community Survey 5-Year Estimates* (Census 2020) for each state, county, and block group (wholly or partially) within the geographic scope of analysis:
 - i. total population;
 - ii. total population of each racial and ethnic group (i.e., White Alone Not Hispanic, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, some other race, two or more races, Hispanic or Latino origin [of any race]) (count for each group);
 - iii. minority population including individuals of Hispanic or Latino origin as a percentage of total population;⁴ and
 - iv. total population below poverty level as a percentage.⁵

The data should be collected from the most recent *American Community Survey* files available, using table #B03002 for race and ethnicity data and table #B17017 for low-income households (Census 2020). A table template is provided below.

⁴ To calculate the percent total minority population, subtract the percentage of “White Alone Not Hispanic” from 100 percent for any given area.

⁵ To calculate percentage of total population below poverty level, divide the total households below the poverty level by the total number of households and multiply by 100.

- (b) Identification of environmental justice populations by block group, using the data obtained in response to part (a) above, by applying the following methods included in EPA's *Promising Practices for Environmental Justice Methodologies in NEPA Reviews* (2016).
 - i. To identify environmental justice communities based on the presence of minority populations, use the "50-percent" and the "meaningfully greater" analysis methods. To use the "50-percent" analysis method, determine whether the total percent minority population of any block group in the affected area exceeds 50-percent. To use the "meaningfully greater" analysis, determine whether any affected block group affected is 10-percent greater than the minority population percent in the county using the following process:
 - 1. calculate the percent minority in the reference population (county);
 - 2. to the reference population's percent minority, add 10-percent (i.e., multiply the percent minority in the reference population by 1.1); and
 - 3. this new percentage is the threshold that a block group's percent minority would need to exceed to qualify as an environmental justice community under the meaningfully greater analysis method.
 - ii. To identify environmental justice communities based on the presence of low-income populations, use the "low-income threshold criteria" method. To use the "low-income threshold criteria," the percent of the population below the poverty level in the identified block group must be equal to or greater than that of the reference population (county).
- (c) A map showing the project boundary and location(s) of any proposed project-related construction in relation to any identified environmental justice communities within the geographic scope. Denote on the map if the block group is identified as an environmental justice community based on the presence of minority population, low-income population, or both.
- (d) A discussion of anticipated project-related effects on any environmental justice communities for all resources where there is a potential nexus between the effect and the environmental justice community. For any identified effects, please also describe whether or not any of the effects would be disproportionately high and adverse.

- (e) If environmental justice communities are present, please provide a description of your public outreach efforts regarding your project, including:
 - i. a summary of any outreach to environmental justice communities conducted prior to filing the application (include the date, time, and location of any public meetings beyond those required by the regulations);
 - ii. a summary of comments received from members of environmental justice communities or organizations representing the communities;
 - iii. a description of information provided to environmental justice communities; and
 - iv. planned future outreach activities and methods specific to working with the identified communities.
- (f) A description of any mitigation measures proposed to avoid and/or minimize project effects on environmental justice communities.
- (g) Identification of any non-English speaking groups, within the geographic scope of analysis, that would be affected by the project (regardless of whether the group is part of an identified environmental justice community). Please describe your previous or planned efforts to identify and communicate with these non-English speaking groups, and identify and describe any measures that you propose to avoid and minimize any project-related effects to non-English speaking groups.
- (h) If new construction is proposed, identification of sensitive receptor locations (e.g., schools, day care centers, hospitals, etc.) within the geographic scope of analysis. Show these locations on the map generated in step (c). Provide a table that includes their distances from project facilities and any project-related effects on these locations, including measures taken to avoid or minimize project-related effects.

This study should be conducted in consultation with other relicensing stakeholders who express interest. The final study report should include documentation of any consultation you conducted with entities that expressed interest in environmental justice, copies of their comments, and an explanation of how you have addressed their comments in your final response.

Level of Effort and Cost

Section 5.9(b)(7) – 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.

The estimated cost of all efforts to complete this study is \$50,000 and can be completed in a single study season. As stated previously, there is currently no approved study that would achieve the goals and objectives of the requested Environmental Justice Study.

Template for Environmental Justice Table

	RACE AND ETHNICITY DATA										LOW-INCOME DATA
Geography	Total Population (count)	White Alone Not Hispanic (count)	African American (count)	Native American/ Alaska Native (count)	Asian (count)	Native Hawaiian & Other Pacific Islander (count)	Some Other Race (count)	Two or More Races (count)	Hispanic or Latino (count)	Total Minority (%)	Below Poverty Level (%)
State											
County or Parish											
Census Tract X, Block Group X											

IV. NEW STUDIES NOT RECOMMENDED BY STAFF

Socioeconomic Analysis

ESSLIA's Requested Study

ESSLIA requests that SCE be required to perform a study to evaluate impacts of the project on the recreation/tourism economy in the "Permit and Project Impact Area" and "Mono County's Project Impact Area". The objectives of the requested study are to evaluate visitors' spending habits, frequency of visits, and number of nights stayed in the project area to determine the economic impacts the project might have on the "Permit and Project Impact Area." As part of its request, ESSLIA states that SCE should develop a "more comprehensive visitor and users survey" in consultation with the Mono County Board of Supervisors, the Mono County Economic Development Office, Forest Service, and the California Department of Fish and Wildlife.

Discussion and Staff Recommendation

Section 5.18(b)(5)(ii) of the Commission's regulations requires that applicants for new licenses provide a description of the affected environment and an analysis of the project proposal on socioeconomic resources. Specifically, Section 5.6(d)(3)(xi) of the Commission's regulations requires that applicants provide a general description of socioeconomic conditions in the vicinity of the project including general land use patterns (e.g., urban, agricultural, forested), population patterns, and sources of employment in the project vicinity. Section 5.18(b)(5)(ii)(B) also requires that the final license application contain an analysis of how the project proposal would affect these socioeconomic conditions.

As part of our environmental analysis, we intend to evaluate, to the extent feasible, the effects of a relicensing decision on the project, including effects on recreation in project-affected area. Any effects of SCE's proposal that can be reasonably quantified (e.g., lost generation) will be evaluated by staff. For non-power resources, as has been our practice, our analysis will be qualitative in nature. We do not typically require studies that attempt to quantify the economic value of environmental or recreation resources. Rather, potential impacts or benefits to any resource should be reasonably identified in SCE's proposed studies (e.g., *Study REC-1: Recreation Technical Study Plan*). The results of this study could be used to develop PM&E measures, as necessary.

ESSLIA's request for SCE to develop a "more comprehensive visitor and users survey" does not describe how SCE should specifically analyze the data or what specific metrics/expenditures should be summarized. ESSLIA also does not define what the "Permit and Project Impact Area" and "Mono County's Project Impact Area" are. Therefore, ESSLIA's request lacks the necessary detail and methodology for staff to fully

understand how and where information would be collected [section 5.9(b)(6)], and what information would be included in any study report to inform staff's environmental analysis [section 5.9(b)(4)]. Due to that and the adequacy of the proposed REC-1 study in collecting information that will inform an analysis of project effects on recreation and tourism, we do not recommend ESSLIA's requested study.

Additionally, should SCE conduct any analyses to assess the economic impacts of the licensing proposal on individual businesses, we note that the Commission does not have authority to adjudicate claims for, or to require through license requirements or any other means, payment of damages for project-induced effects to private property [section 5.9(b)(5)].⁶

V. STUDIES REQUESTED BUT NOT ADOPTED BY SCE

Full Project Decommissioning Study

Forest Service's Requested Study

Due to the Rush Creek Project being partially located within the Wilderness Area, Forest Service has stated that relicensing the project may be prohibited by the Wilderness Act, absent Congressional action that specifically exempts the project.⁷ For this reason, Forest Service requests that SCE conduct a study to evaluate the effects of a full decommissioning of the project. Forest Service states that the study should include: (1) developing information necessary to determine the potential impacts of decommissioning Gem Lake in combination with Waugh Lake, and any other project facilities found within the Ansel Adams Wilderness; and (2) ensuring that potential land use changes conform with the relevant land management direction. Forest Service requests that the study include a combination of standard engineering methodologies, visual assessments and simulations, recreational surveys and estimates, botanical modeling, hydraulic modeling, and local public engagement. Forest Service specifies that these efforts may include

⁶ See, e.g., *Ohio Power Co.*, 71 FERC ¶ 61,092, at 61,312 (1995) (citing to *South Carolina Public Service Authority v. FERC*, 850 F.2d 788, 795 (D.C. Cir. 1988)). Such property owners would need to seek redress with the licensee. See *PacifiCorp*, 133 FERC ¶ 61,232, at P 163 (2010), order on reh'g, 135 FERC ¶ 61,064 (2011); *Portland General Electric Company*, 107 FERC ¶ 61,158, at PP 27-33 (2004); *FPL Energy Maine Hydro, LLC*, 106 FERC ¶ 61,038, at PP 53-55 (2004). Moreover, Section 10(c) of the FPA makes clear that a licensee of a hydropower project "shall be liable for all damages occasioned to the property of others by the construction, maintenance, or operation of the project works...16 U.S.C. § 803."

⁷ See letters filed by Forest Service on April 14, 2022; July 15, 2022; and October 11, 2022.

quantification of the existing botanical resources, quantification of public recreational use patterns, construction/deconstruction labor and equipment estimates (and subsequent Wilderness Minimum Requirements Analysis), scenery evaluations, development of a project hydraulic model, modeling of post-removal landscape remediation efforts, and surveys of impacts to local services and the surrounding community.

Comments on the Study

SCE contends that the study request is unnecessary because it disagrees with the position that the Rush Creek Project cannot be relicensed. SCE maintains that the Rush Creek Project is an “existing private right,” pre-dating the designation of the Wilderness Area. In addition, SCE cites the Commission’s policy referenced in Scoping Document 2 (SD2), regarding how decommissioning is not considered to be a reasonable alternative unless it is proposed by the applicant. SCE states that it is not currently proposing project decommissioning and that Commission staff noted in SD2 that it is premature at this time in the relicensing process to determine whether there are any potential serious resource concerns exist that could not be mitigated with appropriate licensing measures such that decommissioning a reasonable alternative. SCE also notes Commission staff’s response in SD2 that it is Commission policy not to recommend requests for decommissioning cost studies and/or establishment of decommissioning funds where there is no evidence in the project record indicating the life of the project will end during the term of any new license that may be issued for the project and there is no indication that the licensee would lack the financial resources if it were to be decommissioned.

Discussion and Staff Recommendation

As provided in the *Interagency Task Force (ITF) Report on NEPA Procedures in FERC Hydroelectric Licensing* (2000), staff assess the need for a detailed analysis of a decommissioning alternative based on the consideration of the beneficial or adverse effects of the project on a variety of resource interests, including but not limited to: (1) the presence of listed threatened or endangered species; (2) the economic viability of the project, including costs of resource protection measures; (3) whether the river is targeted for fish recovery; (4) the feasibility of fish passage; (5) the project’s consistency with comprehensive plan(s); (6) whether the river is in a protected area (e.g., scenic river, wilderness area); (7) the effectiveness of past mitigation measures and availability of future measures; (8) support by the applicant or other parties for decommissioning; (9) Tribal lands, resources, or interests; (10) water quality issues, including presence of toxic sediments; (11) potential opportunities for recreation; (12) the physical condition of project; (13) the presence of existing project-dependent development (e.g., houses abutting reservoir); (14) other non-power project-related benefits (e.g., municipal water supply, flood control, irrigation); (15) project-dependent resource values (e.g., recreation, wetlands, wildlife, habitat); (16) the need for power and ancillary services; and (17) historic properties.

When SD2 was issued on May 27, 2022, the Forest Service had just begun communicating to staff about the effect of the Wilderness Act on the proposed relicensing of the Rush Creek Project. For that reason, staff did not include decommissioning as a reasonable alternative in SD2. However, based on the information filed by Forest Service on October 12, 2022, Commission staff now believe that project decommissioning is at least foreseeable such that a decommissioning alternative should be studied. Therefore, we recommend that SCE conduct a study to evaluate the effects of decommissioning the project.

The study should assess the feasibility of full project decommissioning, including options to remove all project facilities or leave all/some in place. The study should describe possible flow and water level changes (including potential for flooding and socioeconomic impacts) that may occur under each option; and describe the types and quantities of any accumulated sediment that would be released from behind each dam, including the presence of any known contaminants that could be released downstream. The study should include a general feasibility discussion with descriptions of each decommissioning option (e.g., removing all facilities, leaving all/some facilities in place), including the potential physical and environmental benefits and concerns associated with each option. In addition, each decommissioning option should include estimates of the associated capital, operational (including lost power production), and maintenance costs. The cost and effort of the study will depend on the number of decommissioning options included in the analysis and the amount of existing information that is available, including data collected from the other environmental studies required by this determination.

Sediment Accretion at Silver Lake Inlet

ESSLIA's Requested Study

ESSLIA states its concern regarding the potential continued effects of the operation and maintenance of the Rush Creek Project on the accretion of sediment at the inlet to Silver Lake, located approximately 0.7 mile downstream of the project. To better understand those effects, ESSLIA requests modifications to the following studies proposed by SCE: AQ-1: Instream Flow; AQ-2: Hydrology; and AQ-5: Geomorphology. More specifically, it requests that the studies include: (1) collecting appropriate sediment coring samples and conducting sediment sample comparative analysis at locations along the "entire Permit Area and Project Impacted Areas" to help identify and determine the source of sediment; (2) conducting sediment analysis and sediment scouring modeling; (3) measuring flow and sediment deposition from April through December at multiple hydrology and cross-transect locations along the Silver Lake banks beginning at the inlet of Rush Creek into Silver Lake; (4) conducting a Silver Lake bank erosion study; (5) developing a remediation plan that includes potential measures to minimize the sediment

accretion at Silver Lake, including periodic dredging, bank management, and/or beneficial uses wetland creation techniques for periodic channel maintenance; and (6) documenting how sediment build up at Agnew dam has been historically managed.

Comments on the Study

In response to similar comments made by ESSLIA on the proposed study plan, SCE stated that the technical studies proposed in the RSP would document sediment conditions and sediment transport within the Rush Creek Watershed, including at the Rush Creek inlet into Silver Lake, and that results of these studies would inform whether the project is adversely impacting sediment input and transport in Rush Creek. SCE stated that if project-related impacts were identified, SCE would develop appropriate mitigation measures in the license application.

Discussion and Staff Recommendation

ESSLIA does not described the specific methodologies (number and location of sampling sites, specific methodologies to be employed) and does not describe how SCE would analyze the data or what specific metrics/expenditures would be summarized, referring only to “current industry standard cost effective [*sic*] study methodologies available” [section 5.9(b)(6) and (7)]. ESSLIA also does not clearly define what the “Permit and Project Impact Area” is, so the scope of the requested effort is not clear. Finally, ESSLIA does not provide a rationale for why the proposed studies would not be sufficient in gathering the data needed to determine the effects of the project on downstream sedimentation.

SCE’s proposed AQ-1, AQ-2, and AQ-5 studies will provide information that can be used to evaluate whether and to what extend that project operation causes the scour/deposition of sediment in Rush Creek near the inlet of Silver Lake. AQ-1 includes: (1) collecting topographic information near the inlet; (2) collecting water surface elevations along the channel; (2) using the stage-discharge relationship of Silver Lake over a range of flows to incorporate backwater effects in the channel hydraulic modeling; and (4) conduct one- and two-dimensional modeling to characterize the channel hydraulics and identify potential scour/deposition conditions under existing and proposed project operations, as well as historical unimpaired hydrology. AQ-2 includes hydrologic modeling of Rush Creek under existing and proposed project operations, as well as historical unimpaired hydrology. AQ-5 includes: (1) characterizing the existing sediment conditions in Rush Creek; (2) characterizing sediment capture/deposition in the project reservoirs; (3) identifying historical and existing sources of sediment within and adjacent to project-affected stream segments, project reservoirs, and other project facilities, including major gullies; (4) summarizing any existing sediment management practices at the project reservoirs; and (5) mapping sediment in the exposed reservoir bed areas.

Because SCE's proposed studies would provide sufficient information necessary for Commission staff to analyze the effects of the project on downstream sedimentation, including the extent to which it is contributing to sediment accretion at the Silver Lake inlet, we do not recommend ESSLIA's requested modifications.

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