FEDERAL ENERGY REGULATORY COMMISSION
Washington, DC 20426
March 26, 2015

OFFICE OF ENERGY PROJECTS

Project No. 12496-002 – California
Lassen Lodge Hydroelectric Project
Rugraw, LLC

Subject: Scoping Document 2 for Lassen Lodge Hydroelectric Project (P-12496)

To the Party Addressed:

The Federal Energy Regulatory Commission (Commission) is reviewing the license application filed on April 21, 2014, by Rugraw, LLC (Rugraw) for licensing of the proposed the Lassen Lodge Hydroelectric Project (FERC No. 12496). The proposed project would be located on the South Fork Battle Creek, near the Town of Mineral, Tehama County, California. No federal lands or Indian reservations are located within the proposed project boundary.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff intends to prepare an ***Environmental Impact Statement (EIS)***, which will be used by the Commission to determine whether, and under what conditions, to issue an original 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 ***EIS*** is thorough and balanced.

In our October 3, 2014, Scoping Document 1 (SD1), we disclosed our preliminary view of the scope of environmental issues associated with the Lassen Lodge Project. Based on written comments we received throughout the scoping process and verbal comments we received at the two scoping meeting held on November 5, we prepared the enclosed Scoping Document 2 (SD2). We prepared SD2 to provide information on the proposed action and alternatives, the environmental analysis process we will follow to prepare the ***EIS***, and a revised list of issues to be addressed in the ***EIS***.

We appreciate the participation of governmental agencies, non-governmental organizations, Indian tribes, and the public in the scoping process. Key changes from SD1 to SD2 are identified in bold, italicized type. SD2 is being distributed to all entities on the Commission's mailing list for this project. If you wish to be added to or removed

from the Commission's official mailing list, please send your request by email to efiling@ferc.gov or by mail to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Room 1A, Washington, DC 20426. All written or emailed requests must specify your wish to be removed from or added to the mailing list and must clearly include the following on the first page: **Lassen Lodge Project No. 12496-002**.

The enclosed SD2 supersedes the October 3, 2014, SD1. SD2 is issued for informational use by all interested entities; no response is required. If you have any questions about the scoping process or the development of the ***EIS*** for this project, please contact Adam Beeco at (202) 502-8655 or via email at: adam.beeco@ferc.gov. Additional information about the Commission's licensing process and the Lassen Lodge Project may be obtained from the Commission's website, www.ferc.gov.

Enclosure: Scoping Document ***2***

cc: Mailing List
Public Files

SCOPING DOCUMENT 2

LASSEN LODGE HYDROELECTRIC PROJECT

CALIFORNIA

PROJECT NO. 12496-002

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

March 2015

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SCOPING DOCUMENT 2

Lassen Lodge Hydroelectric Project, No. 12496

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 up to 50 years for the construction, operation, and maintenance of original non-federal hydroelectric projects. On April 21, 2014, Rugraw, LLC (Rugraw) filed an application for an original license for the 5.0 megawatt (MW) Lassen Lodge Hydroelectric Project (FERC Project No. 12496-002).

The proposed project is located on the South Fork Battle Creek, near the town of Mineral, Tehama County, California (Figure 1). No federal lands or Indian reservations are located within the proposed project boundary. The Lassen Lodge Project would be operated as a run-of-river project. There would be no proposed storage capacity and the reservoir surface would be approximately 0.5 acre. The estimated annual generation is 25,000 megawatt-hours. A detailed description of the project is provided in section 3.0.

The National Environmental Policy Act (NEPA) of 1969,[2] the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of licensing the Lassen Lodge Project as proposed, and also consider reasonable alternatives to the licensees' proposed action. ***Based upon the comments we received during scoping, including specific requests by National Marine Fisheries Service (NMFS) and Tehama County, we intend to prepare an environmental impact statement (EIS) that describes and evaluates the probable effects, including an assessment of the site-specific and cumulative effects, if any, of the proposed action and alternatives.***

[1] 16 U.S.C. § 791(a)-825(r).

[2] National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370(f) (2006).

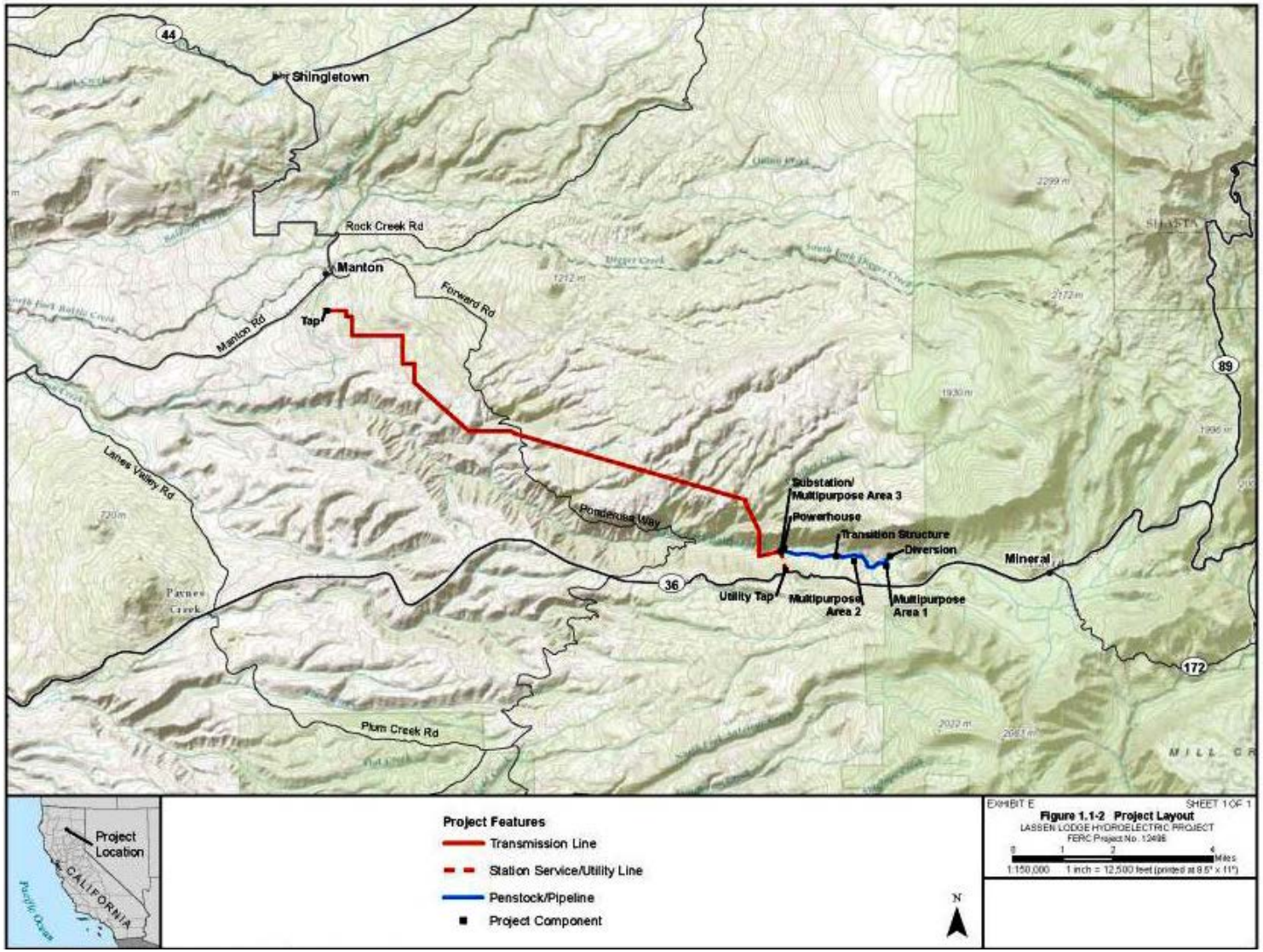

Figure 1. Project features and location map (Source: Application).

2.0 SCOPING

This Scoping Document ***2*** (SD***2***) is intended to advise all participants as to the proposed scope of the ***EIS*** and to seek additional information pertinent to this analysis. This document contains: (1) a description of the scoping process and schedule for the development of the ***EIS***; (2) a description of the proposed action and alternatives; (3) a preliminary identification of environmental issues; (4) a request for comments and information; (5) a proposed ***EIS*** outline; and (6) a preliminary list of comprehensive plans which 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. According to NEPA, the process should be conducted early in the planning stage of the 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 ***EIS***;

- identify how the project would or would not contribute to cumulative effects in the project area;

- identify reasonable alternatives to the proposed action that should be evaluated in the ***EIS***;

- solicit, from participants, available information on the resources at issue; and

- determine the resource areas and potential issues that do not require detailed analysis during review of the project.

2.2 COMMENTS, SCOPING MEETINGS, AND ENVIRONMENTAL SITE REVIEW

We issued SD1 on October 3, 2014, to enable resource agencies, Indian tribes, NGOs, and the public to more effectively participate in and contribute to the scoping

process. In SD1, we requested clarification of preliminary issues concerning the proposed projects and identification of any new issues that need to be addressed in the project ***EIS***. On November 5, 2014, we held joint scoping meetings with the California State Water Resources Control Board. These meetings are considered joint meetings for the purposes of both NEPA and the California Environmental Quality Act. On November 6, 2014, we participated in an environmental site review to the proposed project site.

Based on verbal comments at the meeting, the environmental site review, and written comments we received throughout the scoping process we have revised SD1. SD2 presents our current view of issues to be considered in the ***EIS***. ***Key changes from SD1 to SD2 are identified in bold and italicized type.***

The following entities filed written comments on SD1:

Commenting Entity	***Filing Date***
NOAA Fisheries Service (NMFS)	***December 4, 2014***
Pacific Gas and Electric Company (PG&E)	***December 5, 2014***
Tehama County Planning Department	***December 17, 2014***

Note that the primary purpose of SD2 is to identify issues to be analyzed in the EIS, not to identify all recommended and/or potential protection, mitigation, and enhancement (PM&E) measures. All proposed and recommended PM&E measures will be analyzed in the EIS.

2.2.1 Issues Raised During Scoping Commenting Period

Comment: Tehama County and NMFS state that the project has the potential to have significant impacts to the human environment and therefore requires the completion of an EIS rather than an environmental assessment (EA)

Response: We revised the scoping document to indicate that we intend to complete an EIS rather than an EA.

Comment: Tehama County states that the project has the potential to have significant impacts to fish populations, including effects of flow levels on spawning.

Response: We revised the scoping document to specify that effects of project operation on stream flow and aquatic resources include effects on resident and anadromous fish.

Comment: PG&E states that Lassen Lodge proposed operations could adversely affect PG&E's ability to comply with instream flow and ramping requirements at their downstream Coleman, Inskip and South Diversion dams.

Response: We have modified Section 4.2.2 Aquatic Resources to include these possible impacts as a potential resource issue.

Comment: NMFS states that the Hydraulic Geometry methods that the applicant used to determine habitat-flow relationships are flawed and inadequate, and, consequently, Rugraw's final license application was deficient.

Response: Consultation between NMFS and the applicant regarding improving methods for quantifying flow-habitat relationships is ongoing. We will evaluate flow-habitat relationships in the EIS.

Comment: NMFS states that the scoping document omits mention of anadromous salmonids, anadromous salmonids are reasonably certain to reach the project's bypassed reach over the term of a new license, and critical habitat for spring-run Chinook salmon and California Central Valley steelhead and essential fish habitat for all Pacific Chinook salmon exists within the project bypassed reach.

Response: We revised the scoping document to include effects on critical habitat, essential fish habitat, and all salmonid species known to occur in the Battle Creek basin.

Comment: NMFS states that project operations would directly and cumulatively affect resident and anadromous salmonids and related habitat.

Response: We revised the scoping document to include fisheries resources and water quality as resources with the potential to be cumulatively affected by the project and other activities in the Battle Creek basin. We included references to both resident and anadromous salmonids, and changed reference of "migratory" fish to "anadromous" fish.

Comment: NMFS states that the 13 cfs minimum instream flow proposed by the applicant is too low and that the applicant's proposed operations at flow levels below 18 cfs and during the summer period need to be clarified.

Response: The applicant and interested agencies, including NMFS, are conducting ongoing consultation regarding minimum flow scenarios to be evaluated in aquatic habitat, temperature, and sediment transport models. As part of the flow-habitat relationship analysis in the EIS, we will consider effects of multiple

operational scenarios including minimum instream flows that differ from the proposed 13 cfs.

Comment: NMFS states that results of the applicant's water temperature model and sediment transport model should be included in the EIS.

Response: We revised the scoping document to specify that effects of project operation on water quality include effects on temperature and sediment transport in South Fork Battle Creek.

Comment: NMFS states that during project operations, project monitoring should include: (1) flow monitoring just above the diversion structure; (2) water temperature monitoring between Angel Falls and the tailrace, in addition to existing locations; and (3) continuous monitoring of the tailrace for fish.

Response: We will assess potential monitoring requirements for water temperature, stream flow, and fish presence in the tailrace in the EIS.

Comment: NMFS states that the effects of tailrace flows on fish migration and stranding should be evaluated in the EIS.

Response: We revised the scoping document to include effects of project operation and facilities on fish stranding and migratory cues.

Comment: NMFS states that future South Fork Battle Creek Restoration actions will enable anadromous fish to access the project's bypassed reach up to Angel Falls.

Response: We revised the scoping document to include the Battle Creek Salmon and Steelhead Restoration Project as an action to be included in analysis of cumulative effects.

Comment: NMFS states that due to FERC's study request for developing water temperature and sediment transport modeling study plans, the estimated timing of issuing a REA Notice during January of 2015 is unlikely. Therefore, NMFS suggests a date of March 2015.

Response: We modified the schedule accordingly.

Comment: NMFS states that they filed the Recovery Plan for the Evolutionarily Significant Units of Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon and California Central Valley

steelhead with the Commission for consideration as a Comprehensive Plan on October 6, 2014.

Response: We revised the scoping document to include this plan.

Comment: NMFS requests modifications/updates to the FERC mailing list.

Response: We modified the mailing list accordingly.

3.0 PROPOSED ACTION AND ALTERNATIVES

In accordance with NEPA, the environmental analysis will consider the following alternatives, at a minimum: (1) the no-action alternative, (2) Rugraw's proposed action, and (3) ***Rugraw's proposed action with staff modifications (staff alterative)***.

3.1 NO-ACTION ALTERNATIVE

The no-action alternative is license denial. Under the no-action alternative, the project would not be built and environmental resources in the project area would not be affected.

3.2 APPLICANT'S PROPOSAL

3.2.1 Proposed Project Facilities

Rugraw proposes to construct the project 1.5 miles west of Mineral, California, on the South Fork Battle Creek in Tehama County. The project would consist of a diversion dam, intake structure, fish screen, pipeline, penstock, powerhouse, substation, switchyard, four multipurpose areas, transmission line, and project access roads from Route 36 to the diversion dam and from Route 36 to the powerhouse. The 6-foot-high, 2-foot-wide, and 94-foot-long diversion dam would be located at river mile 23, approximately 0.5 RM upstream of the Old State Highway Route 36 Bridge and creating a 0.5-acre impoundment.

The 18-foot-wide, 8-foot-high, 53-foot-long intake structure would include nine five by eight-foot perforated flat panel fish screens. Once water enters the intake, it would travel through a 48-inch-diameter, 7,258-foot-long, low-pressure pipeline and then into a 36-inch-diameter, 5,230-foot-long, high-pressure penstock. Water would then enter a 50 by 50-foot powerhouse with a single multi-jet vertical Pelton-type turbine and would be closed-coupled to a synchronous generator with a capacity of 5 megawatts. The project bypass reach would be approximately 2.4 miles long.

The water would then exit the powerhouse at atmospheric pressure into the tailrace within the powerhouse foundation. The tailwater would then enter a buried concrete box culvert (8 by 6 by 70-foot) and exit to the stream by cascading 9 feet to the rock-strewn streambed over existing large boulders.

A new, enclosed, and security-fenced substation would be located approximately 500 feet west-southwest of the powerhouse. Underground conduits from the powerhouse to the substation would convey generated power. The substation would disturb an approximate area of 50 by 50-foot.

A new 12-mile-long, 60-kV transmission line would connect the powerhouse substation to a switchyard adjacent to the Pacific Gas & Electric Company's (PG&E) 60-kV Volta-South transmission line in the town of Manton, California.

A security-fenced switchyard would be located approximately 300 feet east of the point of interconnection. The switchyard would disturb an area of approximately 40 by 35-foot, including a 10 by 10-foot concrete block building. An approximately 0.1 mile aerial 12-kV line would connect to the existing PG&E line.

Rugraw also proposes four multipurpose areas: (1) a construction yard near the diversion dam; (2) a construction area near the powerhouse; (3) a multipurpose area near the Old Highway 36 Bridge that would also serve as a helicopter landing site; and (4) a multipurpose area toward the west end of the proposed project boundary to support transmission line construction.

3.2.2 Proposed Project Operations

Rugraw would operate the Lassen Lodge Project run-of-river and expects to maintain the water surface elevation of the proposed 0.5 acre-reservoir at +/-0.5 inches throughout the normal operating range with no storage capacity.

Rugraw proposes to release a minimum flow of 13 cfs to the bypass reach. All flows greater than the minimum would be diverted by the project intake up to the maximum capacity of the turbine (95 cfs). Stream flows greater than the combined turbine capacity and minimum flow would proceed unimpeded by the project through the bypass reach.

3.2.3 Proposed Environmental Measures

Rugraw, working with the consulted entities, has identified measures to protect and enhance environmental resources of the project area. Rugraw proposes to operate the Lassen Lodge Project with the environmental protection and enhancement measures described below.

Geologic and Soil Resources

- Prepare and implement a Storm Water Pollution and Prevention control plan as part of final design.

- Construct the project in the dry season (April through October).

- Use best management practices to minimize the erosion of soils in construction areas and limit the transport of sediment from the construction site to the stream, including:

    - Limiting soil disturbance to only those area necessary for construction.
    - Installing silt fences in construction areas.
    - Applying water to construction area to control wind erosion and dust.
    - Revegetating disturbed areas as soon as practicable following construction.

Aquatic Resources

Water Quality Resources

- Perform sluicing operations in a manner that will not increase sediment deposition above background levels in compliance with requirements of the California Department of Fish and Wildlife (Cal Fish and Wildlife).

- Design the project intake, penstock, and turbines to prevent air entrainment and gas supersaturation in the powerhouse discharge waters.

- Cure all concrete before it comes in contact with stream water.

- Avoid all discharges of petroleum products or other construction materials into surface waters.

- Monitor water temperatures at six locations throughout the project area during project operations. Proposed locations include: 1) the diversion/intake structure, 2) the bridge at SR 36, 3) within the bypass reach above the tailrace, 4) within the bypass reach below the tailrace, 5) within the tailrace, and 6) the wooden bridge at Ponderosa located downstream of Panther Grade. These locations were chosen to provide data on water temperature within the bypass reach, in the penstock, at the point of return to South Fork Battle Creek, and below the project boundary.

Fisheries Resources

- Consult with the Cal Fish and Wildlife after license submission to design fish passage elements to be contained within the diversion dam instream bypass flow channel.

- Construct a control/fish screen structure with a nine, four by eight-foot perforated flat panel fish screens. The fish screens would have 33 round holes per square inch and would be automatically cleaned by a travelling screen cleaner as frequently as necessary to maintain flow and velocity criteria.

- Close the automatic emergency shutoff valve in the event of unanticipated pipeline rupture to ensure continued flow to the bypassed reach. Closing the automatic emergency shutoff valve would direct all flows to the bypassed reach.

- Provide a minimum instream flow of 13 cfs to the bypassed reach at all times when the project is operating and monitor stream flow at three monitoring stations to ensure that minimum instream flows are met during project operations. Two monitoring stations would be within the bypass reach, with one located at the SR 36 bridge above Angel Falls and the other directly above the tailrace. The third station would be located downstream of the tailrace after the mixing of the tailwater and bypass flows.

- Maintain water surface elevation of the project reservoir at +/- 0.5 inches throughout the normal operating range of the project.

- Operate the project with a ramping rate of no more than a 30-percent reduction of the existing stream flow per hour for any change in diversion flow, whether from powerhouse startup or shutdown. Monitor ramping rates during each event to confirm that criteria are met.

- Maintain un-interrupted flows to the project tailrace in the event of unexpected project shut-down.

- Perform all in-water work from July 1 to October 15.

- Provide temporary fish passage during construction of the project diversion/intake structure.

- Monitor the tailrace during project operations for the presence of anadromous fish whenever the facility is visited by staff. Consult with Cal Fish and Wildlife and National Marine Fisheries Service, if anadromous fish are found to occur repetitively, to provide modifications of the tailrace structure to discourage fish attraction.

Terrestrial Resources

Botanical Resources

- Limit ground-disturbing activity and vegetation clearing to the smallest footprint practicable.

- Delineate the limits of construction, work areas, and multipurpose areas with flagging, fencing, and/or stakes, and prohibit ground disturbance outside of these limits.

- Preserve vegetation in place to the extent possible.

- Implement measures to prevent the spread of invasive species and noxious weeds.

- Avoid sensitive aquatic resources such as streams, wetlands, and ponds to the extent possible. Use existing stream and wetland crossings where possible. Where stream or wetland crossings are required, install crossings in compliance with state guidelines for riparian and terrestrial habitat connectivity. Reclaim temporarily disturbed stream and riparian habitat through restoration of preconstruction conditions and riparian plantings and/or seeding, where applicable, with agency-approved seed mixes.

- Provide training to construction staff regarding laws, regulations, and best management practices to protect special-status plant species and their habitats.

- Place exclusion fencing around known individuals and populations of special-status plant species to restrict access by construction equipment and personnel during construction.

- Conduct preconstruction surveys for species not surveyed due to project alignment changes.

- Implement the following measures if special-status plant species are observed during preconstruction surveys:

    - Revise project design to avoid impacting individuals and populations of special-status plant species.
    - Place exclusion fencing around populations of special-status plant species to protect plants during construction.
    - If project design cannot avoid special-status plant species, individuals and populations of species that would be impacted would be transplanted and/or seeds would be collected and sown, in suitable locations outside the area of project impacts.
    - If transplantation or relocation is not possible, conserve and monitor

existing populations occurring outside the area of project impacts.

- Employ biological monitoring personnel during construction to ensure that measures to protect biological resources are implemented appropriately.

Wildlife Resources

- Conduct preconstruction surveys for migratory birds within 100 feet of the project (disturbance area) if disturbance would occur during the nesting season (typically April 15 to July 31). If an active nest (containing eggs or young) of a bird species protected under the Migratory Bird Treaty Act is found during either preconstruction surveys or construction activities, identify the nest to species, mark inconspicuously, and implement a 100-foot buffer with vegetation left in place until any young have fledged.

- Conduct preconstruction surveys for nesting migratory birds, raptors, bald eagles, osprey, American peregrine falcons, prairie falcons, golden eagles, and northern goshawks and implement appropriate buffers to protect active nests during nesting season or until young have fledged.

- Design and construct the transmission line in compliance with current Avian Power Line Interaction Committee guidance to reduce impacts to avian species.

- Conduct preconstruction surveys for species not surveyed due to project alignment changes.

- Avoid in-water work and/or construction in riparian areas during the time that egg masses of foothill yellow-legged frogs are present (typically mid-April through mid-May). Conduct preconstruction surveys for juvenile and adult foothill yellow-legged frogs immediately prior to construction if in-water work would occur during the breeding season (mid-March to August, depending on local water conditions). If egg masses are found, delay construction until eggs have hatched. If juveniles or adults are found within the project reach or 500 feet downstream, relocate individuals outside of the project area (e.g., outside of the area of impact, immediately upstream of the project area). Avoid collecting rocks from in-water environments between March 1 and August 31 to avoid disturbing foothill yellow-legged frogs, and minimizing disturbance to pools and slow runs.

- Avoid ground-disturbing activity on or near talus slopes to protect Sierra Nevada red fox and American pika.

- Avoid potential bat roosting habitat, including rock crevices, cliffs, and snags.

Threatened and Endangered Species

- Avoid ponds identified as potentially suitable breeding habitat for California red-legged frogs by at least 200 feet, and implement best management practices to prevent and minimize construction stormwater-related erosion and sedimentation. Should ground-disturbing activity be required within 200 feet of ponds identified as potentially suitable breeding habitat for the California red-legged frog, avoid these activities between November 15 and April 30, and avoid ground disturbance within 50 feet of ponds identified as potentially suitable breeding habitat.

Land Use

- Construct new roads only when no feasible alternative exists.

- Limit access roads to a one-lane width of 12 feet whenever possible.

- Restore vegetation directly removed or disturbed during project construction as appropriate in accordance with California forestry regulations and best practices.

- Reforest temporary access roads per landowner recommendation when they are no longer required.

Cultural Resources

- Implement a historic properties management plan to resolve any potential project-related adverse effects to cultural resources that may be eligible for inclusion in the National Register of Historic Places.

Aesthetic Resources

- Remove all paint or discoloring agents applied to rocks or vegetation prior to or during construction activities (indicating limits of survey or construction activity) upon completion of construction activities.

- Trimming and clearing of overstory vegetation for access, pole locations, or conductor clearance will use a 'feathering' method to give a natural appearance.

- Use wooden poles to support proposed transmission line to blend with surrounding vegetation and reduce contrast.

- Use helicopters for construction in specific areas to reduce impacts to ground surface.

3.3 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 us, the agencies, Indian tribes, NGOs, and the public.

4.0 SCOPE OF CUMULATIVE EFFECTS AND SITE-SPECIFIC RESOURCE ISSUES

4.1 CUMULATIVE EFFECTS

According to the Council on Environmental Quality's regulations for implementing NEPA (40 C.F.R. 1508.7), a cumulative effect is the effect on the environment that results from the incremental effect of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time, including hydropower and other land and water development activities.

4.1.1 Resources That Could Be Cumulatively Affected

Based on our review of the license application and preliminary staff analysis, we have identified ***water resources (water quality and temperature) and fisheries resources*** (***resident and anadromous fish and related habitat) as having the potential to be cumulatively*** affected by the proposed project ***in combination with other activities in the Battle Creek basin.***

The following actions are in progress in the Battle Creek basin and may contribute to cumulative effects:

- ***Sierra Pacific Industries owns the land surrounding the proposed project area and manages it for timber harvest.***

- ***PG&E operates the Battle Creek Hydroelectric Project No. 1121 on the mainstem Battle Creek and the North and South Forks of Battle Creek, including three diversion dams on South Fork Battle Creek downstream of the proposed Lassen Lodge Project.***

- ***The interagency Battle Creek Salmon and Steelhead Restoration Project will restore approximately 48 miles of salmonid habitat in the Battle Creek basin and includes plans to remove or install fish passage at the three diversion dams located downstream of the proposed project on South Fork Battle Creek.***

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 Battle Creek Basin, specifically the removal (Coleman Diversion Dam and South Diversion Dam) and modification (Inskip Diversion Dam) of dams on the South Fork Battle Creek. Because the proposed action can affect resources differently, the geographic scope for each resource may vary.

The geographic scope for aquatic resources would be the South Fork Battle Creek from the upstream extent of the project reservoir downstream to its confluence with the North Fork Battle Creek. We chose this geographic scope because: (1) the project affects water quality and sediment movement within the project area and areas downstream to the confluence with the North Fork Battle Creek; and, (2) the project influences the ability of salmon and steelhead to utilize historical habitat within the project area.

4.1.3 Temporal Scope

The temporal scope of our cumulative effects analysis in the ***EIS*** will include a discussion of past, present, and future actions and their effects on each resource that could be cumulatively affected. Based on the potential term of an original license, the temporal scope will look up to 50 years into the future, concentrating on the effect to the resources from reasonably foreseeable future actions. The historical discussion will, by necessity, be limited to the amount of available information for each resource. The quality and quantity of information, however, diminishes as we analyze resources further away in time from the present.

4.2 RESOURCE ISSUES

In this section, we present a preliminary list of environmental issues to be addressed in the ***EIS***. We have identified these issues, which are listed by resource area, by reviewing the license application and the Commission's record for the Lassen Lodge Project. This list is not intended to be exhaustive or final, but contains those issues raised to date that could have substantial effects. After the scoping process is complete, we will review this list and determine the appropriate level of analysis needed to address each issue in the ***EIS***. Those issues identified by an asterisk (*) will be analyzed for both cumulative and site-specific effects.

4.2.1 Geologic and Soil Resources

- Effects of project construction on erosion and sedimentation of project lands and waters.

4.2.2 Aquatic Resources

- Effects of project construction activities (e.g., in-water work and excavation) on water quality, including temperature, dissolved oxygen, and turbidity levels around the project construction site.*****

- Effects of project construction activities on the potential release of contaminants (e.g., fuel, lubricants, and other wastes) into project waters.

- Effects of project construction activities (e.g., in-water work and excavation) on ***resident and anadromous fish*** and aquatic habitat***, including critical habitat and essential fish habitat,*** downstream of the project construction site.*****

- Effects of project operation on water quality***, including temperature,*** in the South Fork Battle Creek.*****

- ***Effects of project operation on the sediment transport regime in South Fork Battle Creek.****

- Effects of project operation, including ramping during startup and shutdown and minimum flow releases, on ***resident and anadromous fish*** and aquatic resources in the South Fork Battle Creek.*****

- Effects of project operation and facilities on upstream and downstream fish passage, including entrainment, turbine mortality***, stranding, and migratory cues***.

4.2.3 Terrestrial Resources

- Effects of project construction, operation, and maintenance on vegetation communities (habitat loss, degradation, and fragmentation) and associated wildlife species.

- Effects of project construction, operation, and maintenance and recreational use on the spread of invasive plant species.

- Effects of construction activities and project operation on wetland and riparian communities.

- Effects from disturbance of local wildlife populations, including special-status species, from noise, construction activity, and vehicle (including helicopters) use.

- Effects on special-status wildlife species, including foothill yellow-legged frogs, from construction, operation, and maintenance of the project.

- ***Effects of the proposed transmission line on the potential electrocution and collisions of raptors and other bird species.***

4.2.4 Threatened and Endangered Species

- Potential impacts to listed species from construction, operation, and maintenance of the project including the threatened California red-legged frog***, endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon and associated critical habitat, threatened California Central Valley steelhead and associated critical habitat, and Central Valley fall-run Chinook salmon, which is considered a Species of Concern***.*

4.2.5 Recreation and Land Use

- ***Effects of project construction and operation on existing recreational opportunities***.

- ***Effects of project construction on county roads and state highways.***

- Effects of project construction of new permanent and temporary roads on current land use practices.

4.2.6 Cultural Resources

- Effects on cultural resources that are eligible or potentially eligible for the National Register of Historic Places.

4.2.7 Aesthetic Resources

- Effects of project construction, operation, and maintenance on aesthetic resources in the vicinity of the project, ***including noise from the proposed transmission line***.

4.2.8 Socioeconomics

- Effects of the project on the local economy of Tehama County, California, ***including tourism***.

4.2.9 Developmental Resources

- Effects of any proposed or recommended protection, mitigation, and enhancement measures on the Lassen Lodge Project economics.

5.0 *EIS* PREPARATION SCHEDULE

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

The major milestones, including those for preparing the ***EIS***, are as follows:

Major Milestone	Target Date
Scoping Meetings	November 2014
Scoping Document 2 Issued (if necessary)	January 2015
Ready for Environmental Analysis Notice Issued	***May*** 2015
Deadline for Filing Comments, Recommendations and Agency Terms and Conditions/Prescriptions	***July*** 2015
Draft ***EIS*** Issued	***November*** 2015
Comments on Draft ***EIS*** due	***December*** 2015
Final ***EIS*** Issued	***February*** 201***6***

If Commission staff determines that there is a need for additional information or additional studies, the issuance of the Ready for Environmental Analysis notice could be delayed. If this occurs, all subsequent milestones would be delayed by the time allowed for Rugraw to respond to the Commission's request.

6.0 PROPOSED *EIS* OUTLINE

The preliminary outline for the Lassen Lodge Project ***EIS*** is as follows:

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7.0 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 or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. The staff has preliminary identified and reviewed the plans listed below that may be relevant to the Lassen Lodge 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 section 2.19 of the Commission's regulations. Please follow the instructions for filing a plan at http://www.ferc.gov/industries/hydropower/gen-info/licensing/complan.pdf.

The following is a list of comprehensive plans currently on file with the Commission that may be relevant to the Lassen Lodge Project:

California Advisory Committee on Salmon and Steelhead Trout. 1988. Restoring the balance: 1988 annual report. Sausalito, California.

California Department of Fish and Game. 2010. Final hatchery and stocking program environmental impact report/environmental impact statement. Sacramento, California. January 2010.

California Department of Fish and Game. 2007. California wildlife: Conservation challenges, California's wildlife action plan. Sacramento, California. 2007.

California Department of Fish and Game. U.S. Fish and Wildlife Service. National Marine Fisheries Service. Bureau of Reclamation. 1988. Cooperative agreement to implement actions to benefit winter-run Chinook salmon in the Sacramento River Basin. Sacramento, California. May 20, 1988. 10 pp.

California Department of Fish and Game. 1990. Central Valley salmon and steelhead restoration and enhancement plan. Sacramento, California. April 1990.

California Department of Fish and Game. 1993. Restoring Central Valley streams: A plan for action. Sacramento, California. November 1993.

California Department of Fish and Game. 1996. Steelhead restoration and management plan for California. Sacramento, California. February 1996.

California Department of Fish and Game. 2003. Strategic plan for trout management: A plan for 2004 and beyond. Sacramento, California. November 2003.

California Department of Fish and Wildlife. 2008. California aquatic invasive species management plan. Sacramento, California. January 18, 2008.

California Department of Water Resources. 1983. The California water plan: projected use and available water supplies to 2010. Bulletin 160-83. Sacramento, California. December 1983.

California Department of Water Resources. 1994. California water plan update. Bulletin 160-93. Sacramento, California. October 1994. Two volumes and executive summary.

California State Water Resources Control Board. 1995. Water quality control plan report. Sacramento, California. Nine volumes.

California State Water Resources Control Board. 2011. Water quality control plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. Sacramento, California. December 13, 2006.

California - The Resources Agency. 1989. Upper Sacramento River Fisheries and Riparian Habitat Management Plan. Sacramento, California. January 1989.

Forest Service. 1992. Lassen National Forest land and resource management plan. Department of Agriculture, Susanville, California.

National Marine Fisheries Service. 2014. Recovery Plan for the Evolutionarily Significant Units of Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon and California Central Valley steelhead. Sacramento, California, July 2014.

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

State Water Resources Control Board. 1999. Water quality control plans and policies adopted as part of the State comprehensive plan. April 1999.

U.S. Fish and Wildlife Service. 1990. Central Valley habitat joint venture implementation plan: a component of the North American waterfowl management plan. February 1990.

U.S. Fish and Wildlife Service. 2001. Final restoration plan for the anadromous fish restoration program. Department of the Interior, Sacramento, California. January 9, 2001.

U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.

8.0 MAILING LIST

The list below is the Commission's official mailing list for the Lassen Lodge Project (FERC No. 12496). If you want to receive future mailings for the Lassen Lodge Project from the Commission 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 Commission's mailing list must clearly identify the following on the first page: **Lassen Lodge Project No. 12496-002**. You may use the same method if requesting removal from the mailing list below.

Register online at http://www.ferc.gov/docs-filing/esubscription.asp to be notified via email of new filings and issuances related to this or other pending projects. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, (202) 502-8659

Mailing List

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