# STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for the

# SOUTHERN CALIFORNIA EDISON COMPANY EASTERN SIERRA HYDROELECTRIC POWER PROJECTS ONGOING OPERATIONS AND MAINTENANCE

SOURCES:

Mill Creek, Lee Vining Creek, and Rush Creek Watersheds, tributaries to the

Mono Hydrologic Unit

McGee Creek, Birch Creek, and Bishop Creek Watersheds, tributaries to the

Owens River Watershed

COUNTIES: Inyo and Mono

## WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

#### BY THE EXECUTIVE DIRECTOR:

## I. Project Background

The Southern Power California Edison Company (SCE or Applicant) proposes the Eastern Sierra Hydroelectric Power Projects Ongoing Operations and Maintenance (Project), which involves routine operation and maintenance (O&M) activities at 17 sites associated with four hydroelectric projects. The four hydroelectric projects are: Bishop Creek Hydroelectric Project (Federal Energy Regulatory Commission [FERC] Project No. 1394); Rush Creek Hydroelectric Project (FERC Project No. 1389); Lee Vining Creek Hydroelectric Project (FERC Project No. 1388); and Lundy Hydroelectric Project (FERC Project No. 1390). The four projects and their facilities are located along the eastern slope of the Sierra Nevada in Inyo and Mono counties, California (Attachment A). The four hydroelectric projects span from Mill Creek (near the town of Lee Vining on State Highway 395) to Bishop Creek (approximately two miles west of the city of Bishop on State Highway 168).

The purpose of the Project is to conduct routine O&M activities, under a Clean Water Act Section 404 permit issued by the United States Army Corps of Engineers (USACE), necessary to ensure continued structural integrity, safe functioning, and extend the service life of the four hydroelectric facilities. Project activities will consist primarily of routine maintenance such as removal of sediment, debris, and vegetation and repair of structures and facilities. Many of the activities will require drainage of impoundments, installation of cofferdams, placement of sandbags, and/or bypass of water around or through the sites. On June 16, 2010, the State Water Resources Control Board (State Water Board) issued a water quality certification (2010 certification) under section 401 of the Clean Water Act for maintenance activities within SCE's Eastern Sierra hydroelectric projects. On September 18, 2015, SCE applied to renew the 2010 certification to conduct routine O&M activities at the Bishop Creek, Rush Creek, Lee Vining Creek, and Lundy hydroelectric projects. The proposed maintenance sites, which are detailed in the application for water quality certification (certification), are identified in the Existing Facilities section below.

## II. Project Description

The Project description is divided into the following sections: 1) existing facilities; 2) proposed routine O&M activities; 3) access, staging, and parking; 4) equipment used; 5) schedule; and 6) Dewatering and Diversion Plan.

## **Existing Facilities**

## Bishop Creek Hydroelectric Project

The Bishop Creek Hydroelectric Project (Bishop Project) has a total installed capacity of 26.27 megawatts (MW). The Bishop Creek Project facilities are located in the Owens Valley and the eastern Sierra Nevada in Inyo County, southwest of the city of Bishop. The Bishop Project is located along Bishop Creek and its tributaries, which include South Fork Bishop Creek, Middle Fork Bishop Creek, Green Creek, Birch Creek, and McGee Creek. The facilities are located on private lands and lands managed by the Bureau of Land Management and the United States Forest Service (USFS) in Inyo National Forest and John Muir Wildness.

Project O&M activities will occur at the following Bishop Project facilities:

- Abelour Ditch
- Birch Creek Diversion Intake 2
- · Bishop Creek South Fork Diversion Dam
- Green Creek Diversion Dam
- McGee Diversion Birch McGee
- Powerhouse No. 2 and Intake 3
- Powerhouse No. 3 and Intake 4
- Powerhouse No. 4 and Intake 5
- Powerhouse No. 5 and Intake 6
- Powerhouse No. 6
- · South Fork Bishop Creek South Lake Dam

#### Rush Creek Hydroelectric Project

The Rush Creek Hydroelectric Project (Rush Creek Project) has a total installed capacity of 8.4 MW. The Rush Creek Project is located in the Mono Lake Basin in Mono County. The facilities are located on Rush Creek, approximately 14 miles upstream from Mono Lake, near the town of June Lake. The Rush Creek Project is located within the Inyo National Forest on land managed by USFS. A large portion of Rush Creek Project, which includes Rush Meadows Dam (Waugh Lake) and Gem Lake, is located in the Ansel Adams Wilderness Area, in the Inyo National Forest.

Project O&M activities will occur at the following Rush Creek Project facilities:

- Agnew Lake Dam
- · Gem Lake Dam

#### Lee Vining Hydroelectric Project

The Lee Vining Creek Hydroelectric Project (Lee Vining Project) has a total installed capacity of 11.25 MW. The Lee Vining Project is located in the Mono Lake Basin in Mono County. The

facilities are located on Lee Vining Creek approximately nine miles upstream from Mono Lake and the town of Lee Vining. The Lee Vining Project is located on private lands in Inyo National Forest.

Project O&M activities will occur at the following Lee Vining Project facilities:

- Glacier Creek below Tioga Lake Dam
- · Rhinedollar Lake Dam

#### Lundy Hydroelectric Project

The Lundy Hydroelectric Project (Lundy Project) has a total installed capacity of 3.0 MW. The Lundy Project facilities are in the Mono Lake Basin in Mono County. The facilities are located eight miles north of the town of Lee Vining, near Mill Creek. The Lundy Project is located on private lands in Inyo National Forest.

Project O&M activities will occur at the following Lundy Project facilities:

- Lundy Lake Dam and Mill Creek below Lundy Lake
- Lundy Powerhouse Tailrace and Return Ditch

## Proposed Routine O&M Activities

The Project's routine O&M activities can be divided into six general categories: 1) sediment bypass, 2) gate maintenance, 3) vegetation management, 4) material removal, 5) facilities repair, and 6) penstock inspections.

# 1. Sediment Bypass

Sediment bypass is defined as the regular flushing of stream deposits that accumulate behind diversions and other structures. In order to remove accumulated sediments, water flows are increased to flush sediments from the system. Such water releases are generally performed in the spring, to mimic naturally-occurring flushing flows. SCE proposes to pass flows around intakes to flush sediments from the system.

SCE's historic practice has been to remove one, several, or all hydropower plants from service, as needed, in late winter or early spring, to allow all flows to pass through the open drain valves of desired hydropower plant intakes (i.e., bypassing the hydropower plant and discharging downstream of the dam through the drain valve) while meeting requirements for downstream water users. Typically, hydropower plant intakes are left closed for 24 to 48 hours. The flow bypassed though the drain valve cuts a channel through the accumulated sediment and gravels at the intake, which allows water to carry the accumulated sediment and gravels below the dam. However, only partial removal of accumulated debris is achieved with this method. Large amounts of material remain on the channel banks. This practice is consistent with California Department of Fish and Wildlife (CDFW) requirements for flushing of sediments from the system.

<sup>&</sup>lt;sup>1</sup> Per a Long Term Agreement with CDFW (Notification No. 1600-2008-0099-R6), SCE "may conduct flushing flows by opening valves and allowing existing water flows to move materials from or through their facilities, such as through intakes or weirs. Flushing flows may be used to pass water through the drainage system to remove or spread sediments [to] down stream channels."

## 2. Gate Maintenance

Gate maintenance is defined as the regular opening of gates for a short period for the purpose of flushing accumulated sediments that restrict flow. The purpose of gate maintenance is to avoid or reduce the need to remove sediment deposits by mechanical means. The Department of Safety of Dams (DSOD) requires SCE to perform routine gate maintenance at the following facilities:

- Birch McGee Intake
- Intake 2 chamber drain
- Intake 2 low level outlets
- Intake 3 chamber drain
- Intake 3 low level outlet drain
- Intake 4 chamber drains
- Intake 4 low level outlet drain
- Intake 5 chamber drain
- Intake 5 low level outlet drain
- Intake 6 chamber drain

- Intake 6 low level outlet drain
- Lundy Farmers Gate
- · Lundy flowline sand trap
- Lundy penstock sand trap
- McGee Creek Intake
- Plant 6 flowline sand trap
- Two Birch McGee flowline sand traps
- · South Fork Diversion sluice gate
- South Fork flowline sand trap

Gate maintenance consists of full stroke operation of intake drain gates, sand traps, and chamber drain gates and will not result in the drainage of any ponds. To achieve the desired flushing of accumulated sediments, the gates at all facilities (except Lundy Farmers Gate) will be set to the fully open position for a period of usually less than one minute and then returned to their original position. At the facilities listed above, gate maintenance occurs monthly, with exception of the Birch McGee Intake, which is required to be sluiced routinely (e.g., approximately one to four times per year, depending on rainfall) and cleaned out with mechanical equipment once every year.

For the Lundy Farmers Gate Valve, gate maintenance includes a partial opening of the valve for a limited time, typically one hour or less at approximately 50 cubic feet per second (cfs), to pass any deposited material that has built up and restricts flow. Sediments are sluiced to ensure dam safety and availability of the facility for routine or emergency use. Sand traps are operated routinely to clear valves and trap accumulated debris. The upper trap discharges through a small valve with a capacity of approximately 20 cfs, into Mill Creek at the gage station (United States Geological Survey gage no. 10287069). The lower trap discharges into the pasture at Lundy Plant. Both traps would be operated for short periods of an hour or less. These operations at Lundy Farmers Gate are scheduled to occur once every six months.

#### 3. Vegetation Management

Vegetation management is defined as control of vegetation growth around the Project facilities in order to prevent overgrowth and facilitate site access.

SCE needs to control vegetation growth adjacent to and associated with its facilities, which include powerhouses, streams, canals, impoundments, roads, dams, and outlets. Vegetation overgrowth can interfere with water flow and flow measurement through gage stations. Vegetation management may occur as an activity in itself, or as part of maintenance of measurement stations and flumes. Vegetation that requires control includes weeds, grasses, and emergent and woody vegetation. Methods proposed for vegetation control include brushing, selective thinning, selective removal, or mowing. Removal of vegetation will be completed by hand when feasible. When hand-removal is not feasible, SCE will use mechanical methods. Chemicals will not be used without consultation with the appropriate resource agencies

depending on jurisdiction, which include the USACE, USFS, FERC, CDFW, State Water Board, and the Lahontan Regional Water Quality Control Board (Lahontan Regional Water Board). SCE will avoid, to the extent practical, impacts to living, native trees, and branches greater than or equal to four-inch diameter at breast height (dbh). Should native trees larger than four-inch dbh need to be removed, SCE will notify the State Water Board prior to beginning the work.

All vegetation management will occur outside of the ordinary high water mark (OHWM). If vegetation management is required within the OHWM, SCE will implement the work as outlined in the Material Removal section.

## 4. Material Removal

Material removal is defined as the physical removal of any materials that obstruct water diversions and operations, including vegetation within the OHWM. When necessary, SCE will remove material that obstructs water diversions and operations of hydroelectric generation. Material removal may occur in streams, canals, impoundments, roads, gage stations, intakes and diversion structures, measurement stations, flumes, dams, and outlets. Material may be removed with mechanical equipment or by hand and will entail entry into facilities and waters of the United States. Materials that require removal include: vegetation and downed trees; sediments; and other materials such as debris and garbage.

Material removal will require drainage of intakes and diversion pools. SCE will lower the water level and construct a cofferdam or other barrier to dry the work area, as needed. For small intakes the entire intake will be by-passed and allowed to dewater. SCE will not stockpile or move materials around within the impoundment, but will remove the materials directly with equipment or by hand. No material or equipment will be left within the impoundment overnight. For the following facilities, SCE proposes to remove and deposit natural materials on the side of the channel:

- Abelour Ditch
- Bishop Creek Powerhouse No. 6
- Glacier Creek below Tioga Lake Dam
- Green Creek Diversion Dam
- Lundy Farmers Gate
- Lundy Powerhouse Tailrace and Return Ditch
- McGee Creek Diversion
- Rhinedollar Lake Dam

Aside from facilities listed above, removed sediments will be placed in a designated, previously disturbed, upland area (either road or parking surface) and contained until transported to an approved off-site disposal facility. Material removed will not be stored below the OHWM.

To minimize impacts, SCE will restrict activity in the channel to an area no further upstream or downstream than necessary to do the work. SCE proposes to perform material removal in the spring by augmenting natural flows to assist in the removal of sediment and debris. Rubber mats will be used for crossing streams with mechanical equipment and sediment control best management practices (BMPs) will be implemented to prevent streambed materials from flowing downstream. After the initial removal, SCE estimates this procedure would need to be repeated once every five to ten years.

## i. Removal of Vegetation and Downed Trees

Cleared or trimmed vegetation and woody debris must be properly disposed of in compliance with local, state and federal laws. No vegetation or woody debris will be left at or below the OHWM. However, fallen trees, tree limbs, and other woody debris may be used, after consultation with the State Water Board, USACE, and CDFW, below the OHWM to enhance wildlife habitat. Precautions must be taken to avoid damage to non-target vegetation by people or equipment and, where appropriate, roots and stumps may be left to facilitate vegetation regrowth.

#### ii. Removal of Sediments

Removal of sediment is required when stream deposits are not moved by bypass flows. SCE anticipates use of a backhoe, small bulldozer, or similar earth-moving equipment and hand tools to remove sediment.

#### iii. Removal of Other Materials

In addition to sediments and vegetation, other materials such as debris and rubbish will be removed. These materials will be removed by hand or with mechanical equipment, and disposed of in an appropriate manner.

#### 5. Facilities Repair

Facilities repair is defined as routine maintenance and necessary repair of Project facilities.

SCE routinely repairs structures and facilities, and conducts maintenance to retain the functional and structural integrity of facilities. Facilities include gates, barricades, penstocks, measurement stations and flumes, intakes and diversion structures, and small structures (e.g., gage stations or storage facilities). Facilities repair may require stream entry and material removal activities if excavation of sediments or other materials is required prior to conducting the maintenance or repairs.

#### 6. Penstock Inspections

As required by DSOD and FERC, SCE is required to inspect the penstocks at its Project facilities. Penstock inspections occur once every five years and require the lowering of the reservoir to expose the entry point to the penstock. Penstock inspections will occur at the following facilities:

- Agnew Lake
- Gem Lake
- Intakes 2 through 6
- Lundy Lake
- · Rhinedollar Lake

Penstock inspection at Agnew, Gem, Lundy, and Rhinedollar lakes will require drainage of the reservoirs and pumping water over the dams. Intakes 2 through 6, associated with the Bishop Project, will require drawing down the respective reservoir only.

# Access, Staging, and Parking

Vehicle or pedestrian access to work areas will be via existing access roads. Existing roads and pre-disturbed or graveled areas will be used for parking and/or equipment staging.

A minimum setback of 50 feet from the OHWM of any stream or surface waterbody will be established and maintained for staging during O&M activities.

## Equipment

Routine O&M activities will either be conducted by hand or with mechanical equipment. Mechanical equipment includes: hand-operated power tools, bobcats, backhoes, excavators, trucks, bulldozers, and front-end loaders.

#### Schedule

Attachment B provides the duration and frequency of routine O&M activities for each of the facilities.

# **Dewatering and Diversion Plan**

Prior to conducting any maintenance activities conditioned by this certification, SCE will develop and submit a Dewatering and Diversion Plan for approval by the Deputy Director for the Division of Water Rights (Deputy Director). The purpose of the Dewatering and Diversion Plan is to outline procedures to help prevent pollution and/or siltation and to provide flows to downstream reaches to support aquatic life.

## III. Legal Authority and Requirements

## Water Quality Certification and Related Authorities

The federal Clean Water Act (33 U.S.C. §§ 1251-1387) was enacted "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. § 1251(a).). Section 101 of the Clean Water Act (33 U.S.C. § 1251 (g)) requires federal agencies to "cooperate with the state and local agencies to develop comprehensive solutions to prevent, reduce, and eliminate pollution in concert with programs for management of water resources."

Section 401 of the Clean Water Act (33 U.S.C. §1341) requires every applicant for a federal license or permit which may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that the project will be in compliance with specified provisions of the Clean Water Act, which include water quality standards and implementation plans promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313.). Section 401 of the Clean Water Act directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the Clean Water Act and with any other appropriate requirement of state law. Section 401 of the Clean Water Act further provides that state certification conditions shall become conditions of any federal license or permit for the project. The State Water Board is designated as the state water pollution control agency for all purposes stated in the Clean Water Act and any other federal act (Wat. Code, § 13160). The State Water Board's Executive Director has been delegated the authority to issue a decision on an application for certification (Cal. Code Regs., tit. 23, § 3838, subd. (a).).

On September 18, 2015, the State Water Board received SCE's certification application<sup>2</sup> for the Project under section 401 of the Clean Water Act (33 U.S.C. §1341). SCE has withdrawn and

<sup>&</sup>lt;sup>2</sup> Pursuant to California Code of Regulations, title 23, section 3855(b).

resubmitted its certification application to the State Water Board; the most recent withdrawal and resubmittal request was submitted to the State Water Board on September 6, 2017.

On October 15, 2015, the State Water Board provided notice of receipt of a complete application for the Project to the applicable parties, including the Applicant, United States Environmental Protection Agency (USEPA), USACE, and Lahontan Regional Water Board, pursuant to California Code of Regulations, title 23, section 3835 subdivision (c). The State Water Board provided public notice of the application<sup>3</sup> by posting information describing the Project on the State Water Board's website on January 21, 2016, and sending out an email notification to the "Water Rights Water Quality Certification" email Subscription List. No comments were received.

The State Water Board forwarded the relevant portions of the application for certification to the Lahontan Regional Water Board on March 8, 2016. (Cal. Code Regs., tit. 23, sec. 3855, subd. (b)(2)(B)). Lahontan Regional Water Board staff responded on March 25, 2016, with comments regarding sediment bypass and gate maintenance, vegetation management, the Dewatering and Diversion Plan, facilities repair, debris removal, siltation and erosion, and stream diversion. Lahontan Regional Water Board staff comments have been addressed and included in this certification as appropriate.

Water Code section 13383 provides the State Water Board with the authority to "establish monitoring, inspection, entry, reporting and recordkeeping requirements... and [require] other information as may reasonably be required" for activities subject to water quality certification under section 401 of the Clean Water Act that involve the diversion of water for beneficial use. The State Water Board delegated this authority to the Deputy Director, as provided for in State Water Board Resolution No. 2012-0029. In the Redelegation of Authorities Pursuant to Resolution No. 2012-0029 memo issued by the Deputy Director on September 30, 2013, this authority is redelegated to the Assistant Deputy Directors of the Division of Water Rights.

# Water Quality Control Plans and Related Authorities

The California Regional Water Quality Control Boards adopt, and the State Water Board and USEPA approve, water quality control plans, also known as basin plans, for each watershed basin in the state. The basin plans designate the beneficial uses of waters within each watershed basin and water quality objectives designed to protect those uses pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). The State Water Board may also adopt water quality control plans. The beneficial uses together with the water quality objectives that are contained in the basin plans and state water quality control plans and state and federal anti-degradation requirements constitute California's water quality standards.

The Water Quality Control Plan for the Lahontan Region (Lahontan Basin Plan) designates the beneficial uses of water to be protected along with the water quality objectives necessary to protect those uses for Lee Vining, Rush, and Bishop creeks and their tributaries. The Lahontan Basin Plan identifies existing beneficial uses for Mill, Lee Vining, and Rush creeks in the Mono Hydrologic Unit; and McGee, Birch, and Bishop creeks in the Owens River watershed as: municipal and domestic supply; agricultural supply; industrial service supply; groundwater recharge; freshwater replenishment; hydropower generation; water contact recreation; noncontact water recreation; commercial and sport fishing; cold freshwater habitat; inland saline water habitat; wildlife habitat; preservation of biological habitats of special significance; and spawning (spawning, reproduction, and development). Protection of the instream beneficial uses

<sup>&</sup>lt;sup>3</sup> Pursuant to California Code of Regulations, title 23, section 3858(a).

identified in the Lahontan Basin Plan requires adequate instream flows as well as effluent limitations and other limitations on discharges of pollutants from point and non-point sources to the creeks identified above.

#### Water Rights

SCE entitlements to divert water for the Project are under either water right permits or licenses issued by the State Water Board's Division of Water Rights or claims of pre-1914 appropriations and adjudicated entitlements. This certification does not modify or allow changes to the water rights associated with the Project.

## Construction and Aquatic Pesticides General Permits

The State Water Board has adopted a Construction General Permit<sup>4</sup>, which is required for activities that disturb one or more acres of soil with activities such as clearing, grading, stockpiling, or excavation. The Construction General Permit authorizes the discharge of stormwater runoff to surface waters from construction activities, provided the discharger satisfies all conditions set forth in the permit. The Project will disturb one or more acres of soil and, as a condition of this certification, SCE must obtain coverage under the Construction General Permit.

The Project may require the use of aquatic pesticides (algaecides and aquatic herbicides) to control algae and aquatic vegetation. SCE must obtain coverage under the State Water Board's Statewide General National Pollutant Discharge Elimination System Permit for Residual Aquatic Pesticide Discharges to Waters of the United States from Algae and Aquatic Weed Control Applications<sup>5</sup> (Aquatic Pesticide General Permit) if any aquatic pesticides will be used to control algae or aquatic vegetation.

## California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires environmental review of most public agencies' discretionary actions that have the potential to negatively affect the environment. The State Water Board is the lead agency for the purpose of CEQA compliance.

The State Water Board has reviewed the proposed Project and conditions incorporated into the Project to protect the environment and beneficial uses designated for Mill, Lee Vining, Rush, McGee, Birch, and Bishop creeks. The State Water Board has determined that this Project involves the repair and maintenance of existing facilities and that it qualifies for Class 1 (Existing Facilities) and Class 4 (Minor Alterations to Land) categorical exemptions under the CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15301 and 15304). A Notice of Exemption has been prepared. The State Water Board will file the Notice of Exemption with the Office of Research and Planning within five days of issuance of this certification.

#### Other Agencies' Permits

On October 8, 2015, USACE issued Regional General Permit (RGP) No. 97<sup>6</sup> authorizing SCE to temporarily discharge fill in waters of the United States in association with routine maintenance work to be done at the existing hydroelectric project facilities located at Bishop Creek, Rush Creek, Lee Vining Creek, and Lundy Lake. The USACE's RGP will be in effect until October 7, 2020.

<sup>6</sup> File No. SPL-2009-00171-BAH.

<sup>&</sup>lt;sup>4</sup> Construction General Permit; Water Quality Order 2009-0009-DWQ and National Pollutant Discharge Elimination System (NPDES) No. CAS000002, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ.
<sup>5</sup> Water Quality Order 2013-0002-DWQ, NPDES No. CAG990005, as amended by Orders 2014-0078-DWQ and 2015-0029-DWQ.

CDFW has determined that the Project can be implemented under its long-term Streambed Alteration Agreement with SCE<sup>7</sup> for routine maintenance in Inyo and Mono counties.

#### IV. Discussion

SCE will also implement year-round protection measures and water quality BMPs outlined in section 5 of the application for certification. Below is background and an overview of some of the measures (outlined in section 5 of SCE's certification application) and requirements divided into the following areas of discussion: (a) water quality; (b) aquatic habitat and wildlife; and (c) vegetation.

# Water Quality

Sediment is a natural part of any stream system, with finer sediments being transported under normal flow conditions and coarser sediments being mobilized periodically during higher flow events. Sediment bypass and gate maintenance activities will result in the passage of sediments downstream from each of the four hydroelectric project facilities. The amount of sediment movement estimated at each facility is identified in Attachment B. Sediment movement from these activities could result in a temporary increase in turbidity or movement of suspended sediments downstream of the facility. SCE employs increased flows and flushing flows through the system, annually and on an as-needed basis, to remove sediment built up behind facilities. Sediments will settle once the energy behind the flushing flow subsides. This practice is intended to mimic natural flows; however, flushing flows are of short duration and without sufficient post-peak energy to rework and gradually distribute sediments downstream. SCE's method, as proposed, could result in movement and deposition of pulsed sediments downstream of the facilities, which has the potential to cause a nuisance to downstream users or otherwise adversely affect the stream's beneficial uses. SCE must ensure that flushing flows result in a redistribution of sediment downstream in a manner that does not exceed Lahontan Basin Plan water quality objectives for settleable materials and turbidity. Prior to conducting maintenance activities that require dewatering and diverting flows, the certification requires SCE to submit a Dewatering and Diversion Plan to the Deputy Director for review and approval, and obtain approval prior to implementation.

In order to minimize impacts, SCE will implement a variety of measures, including, but not limited to: water quality BMPs that require procedures to minimize turbidity, pre-Project planning to ensure sediment movement is restricted to pre-designated areas, flagging of upstream and downstream work areas; the restriction of work to designated areas; the restriction of access and staging to previously disturbed/graveled areas; the inclusion of measures that favor vegetation removal by hand; measures to prevent spills of fuels or other hazardous substances; and measures to minimize turbidity, siltation, and erosion resulting from construction activities.

#### Aquatic Habitat and Wildlife

Implementation of the Project could potentially impact aquatic habitats as a result of excavation, fill, and use of equipment in reservoirs or downstream work areas. Project activities could affect water quality in the watershed, which in turn could impact fish populations. Impacts to potential aquatic foraging habitat will be minimized through implementation of water quality protection and avoidance measures which include, but are not limited to: the restriction of parking and staging to designated graveled or paved areas; consultation with a qualified biologist; measures to

<sup>&</sup>lt;sup>7</sup> Agreement Number 1600-2008-0099-R6.

prevent spills of fuels or other hazardous substances; and measures to minimize turbidity, siltation, and erosion resulting from construction activities.

The Sierra Nevada yellow-legged frog and the Yosemite toad are known to occur within dispersal distance of Project facilities. SCE assumes that there is the potential for Yosemite toad to be present at Tioga Lake Dam and Rhinedollar Lake Dam, and for Sierra Nevada yellow-legged frog to be present at Tioga Lake Dam and South Lake Dam. SCE will implement the amphibian avoidance and protection measures outlined in section 5.3.1 of the certification application to minimize the potential for adverse effects to these species. These include: measures to prevent the spill of fuels or other hazardous substances; and measures to minimize turbidity, siltation, and erosion resulting from construction activities. When creek crossing is required for access to facilities, rubber mats will be placed, when possible, in streambeds to protect channels. Implementation of these measures would minimize potential impacts to Sierra Nevada yellow-legged frog and Yosemite toad. The implementation of pre-construction surveys and the scheduling of construction and maintenance activities in the spring, outside the breeding season for these species, will help protect these special-status amphibian species and associated habitat. Further, construction and maintenance impacts will be temporary and restricted to defined work areas.

Forested and other natural areas surrounding Project access routes, work areas, and staging areas may be potential breeding and/or foraging habitat for special-status raptors and birds within the Project area. Impacts to habitat and/or loss of nests for riparian-nesting birds will be minimized with implementation of year-round protection measures and nesting season protection measures. These measures include, among others, pre-construction nesting bird surveys and a prohibition of work within 250 feet of an active riparian bird nest. Impacts to special-status bats will be minimized with implementation of year-round sensitive species protection measures. These measures include limiting work to daylight hours, flagging of delineated work areas, pre-construction surveys, and environmental training for all workers at each of the Project sites.

#### Vegetation

The Project proposes control or removal of approximately 9.77 acres of vegetation that obstructs water diversions or interferes with operations and access to Project facilities. Efforts will be made to minimize the disturbance or removal of vegetation during maintenance activities and, where appropriate, roots and stumps will be left in place to facilitate vegetation regrowth. Attachment B identifies the estimated area of vegetation to be removed at each facility.

Riparian vegetation will be avoided during all sediment bypass, facilities repair, and penstock inspection activities. The use of herbicides to control algae or aquatic vegetation will require SCE to obtain coverage under the Aquatic Pesticide General Permit. If vegetation must be removed, SCE will follow Aquatic Pesticide General Permit requirements and measures applicable to vegetation/material removal.

# V. Findings and Conclusion

The conditions in this water quality certification are needed to protect beneficial uses and ensure that water quality objectives described in the Lahontan Basin Plan are met during Project implementation. When preparing the conditions in this certification, State Water Board staff reviewed and considered a wide range of information including the: (a) Applicant's certification application, including the subsequent plans and submissions of the Applicant; (b) Lahontan

Basin Plan; (c) existing water quality conditions; (d) Project-related controllable factors; and (e) other information in the record.

In order to ensure that the Project meets water quality standards as anticipated, and to ensure that the Project will continue to meet state water quality standards and other appropriate requirements of state law over its lifetime, this certification imposes conditions regarding, among other things, monitoring, enforcement, and potential future revisions. Additionally, California Code of Regulations, title 23, section 3860 requires imposition of certain mandatory conditions for all certifications, which are included in this certification. The State Water Board finds that. with the conditions and limitations imposed by this certification, the proposed Project will be protective of state water quality and other appropriate requirements of state law.

All documents and other information that constitute the public record for this Project shall be maintained by the Division of Water Rights and shall be available for public review at the following address: State Water Board, Division of Water Rights, 1001 I Street, Sacramento, CA 95814.

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT THE EASTERN SIERRA HYDROELECTRIC POWER PROJECTS ONGOING OPERATIONS AND MAINTENANCE will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of state law, if Southern California Edison Company complies with the following terms and conditions during the Project activities certified herein.

**CONDITION 1.** The Applicant shall obtain coverage under, and comply with, the Construction General Permit and any amendments thereto.

**CONDITION 2.** In the event chemical vegetation control is proposed to control algae or aquatic weeds, the Applicant shall obtain coverage under, and comply with, State Water Board Order No. 2013-0002-DWQ (as amended by Order 2014-0078-DWQ), National Pollutant Discharge Elimination System (NPDES) No. CAG990005, Statewide National Pollutant Discharge Elimination System Permit for Residual Aquatic Pesticide Discharges to Water of the United States from Algae and Aquatic Weed Control Applications and any amendments thereto prior to chemical application. The Applicant shall consult with the State Water Board, CDFW, and USACE prior to implementing chemical vegetation removal.

condition 3. Prior to commencing any work that requires a water diversion, the Applicant shall submit a Dewatering and Diversion Plan to the Deputy Director for review and approval. If appropriate, the Applicant may propose to obtain coverage under Lahontan Regional Water Board Order No. R6T-2014-0049, NPDES No. CA G996001, Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Limited Threat Discharges to Surface Waters or an individual NPDES permit. The Deputy Director may modify the Dewatering and Diversion Plan as part of the approval. The Applicant shall not implement any activities associated with the Dewatering and Diversion Plan that may impact water quality or beneficial uses until receipt of Deputy Director approval and any other necessary regulatory approvals. Subsequent modifications to the Dewatering and Diversion Plan must be approved by the Deputy Director prior to implementing the modified Dewatering and Diversion Plan.

**CONDITION 4.** All flow diversions shall be done in a manner that prevents pollution and/or siltation and which provides flows to downstream reaches. Flow diversions shall be of sufficient quality and quantity and of appropriate temperature to support aquatic life.

**CONDITION 5.** Project activities shall not cause an increase in turbidity downstream of each site where O&M activities occur greater than those levels identified in the Lahontan Basin Plan and any amendments thereto. Turbidity monitoring shall be conducted during activities involving the removal of sand, silt, sediment, streambed material, and vegetation within wetted areas. Turbidity monitoring is not required when water is diverted through the intake gates for power generation. The Lahontan Basin Plan<sup>8</sup> requires turbidity increases resulting from controllable water quality factors to comply with the following:

- Where natural turbidity is between 0 and 50 nephelometric turbidity units (NTUs), increases in turbidity shall not exceed 20 percent;
- Where natural turbidity is between 50 and 100 NTUs, increases in turbidity shall not exceed 10 NTUs; and

<sup>&</sup>lt;sup>8</sup> Water Quality Control Plan for the Lahontan Region. Any updates to the turbidity requirements in the Lahontan Basin Plan supersede the turbidity requirements in this certification.

 Where natural turbidity is greater than 100 NTUs, increases in turbidity shall not exceed 10 percent.

The following turbidity monitoring activities shall be implemented:

- a. Sampling locations shall be approximately 50 feet upstream and no more than 300 feet downstream of a Project site.
- b. The upstream monitoring location shall be used to determine natural or background levels for the purpose of monitoring water quality impacts from the Project site activities.
- c. Turbidity shall be measured using nephelometry. Turbidity may be monitored using an in-situ turbidity probe or by collecting grab samples for immediate measurement. A hand-held field nephelometer may be used, provided the meter uses a USEPAapproved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. For each meter used, a calibration and maintenance log shall be maintained on-site and provided to State Water Board staff upon request.
- d. Turbidity monitoring shall begin immediately upon commencement of Project activities in the stream channel, and shall continue for a minimum of 24 hours after flow releases have resumed in accordance with Condition 25.
- e. Monitoring shall occur at least three times daily at approximately the same times, and be representative of the work being conducted.
- f. If monitoring indicates increased turbidity above background levels, but below Lahontan Basin Plan limits, monitoring shall be conducted every two hours until turbidity levels have returned to background levels.

The Deputy Director and the Lahontan Regional Water Board Executive Officer (Executive Officer) shall be notified promptly, and in no case more than 24 hours following when a three-sample running average exceeds turbidity limits. Activities associated with an exceedance shall cease immediately and may not resume without approval from the Deputy Director. Monitoring reports shall be submitted to the State Water Board within two weeks of initiation of monitoring and every two weeks thereafter for the remainder of any Project construction period.

**CONDITION 6.** Project activities shall not cause settleable matter to exceed 0.1 milliliters per liter as measured approximately 300 feet downstream from Project activities.

**CONDITION 7.** An annual report that summarizes maintenance activities, BMPs implemented, survey(s) conducted, findings therefrom, and recommendations shall be submitted to the State Water Board each year. The annual report shall include information supporting that redistribution of sediment downstream of sediment bypass and gate maintenance activities does not cause nuisance to downstream users or otherwise affect beneficial uses. The annual report shall be submitted by March 1 of each year for the previous calendar year.

**CONDITION 8.** Notwithstanding any of the specific conditions in this certification, the Applicant shall comply with all measures, BMPs, monitoring, and reporting described in the certification application and its supplements. These measures include, but are not limited to: preconstruction surveys, flagging of designated work areas, restriction of work outside of designated areas, worker training on all environmental measures, implementing water quality BMPs, monitoring for BMP adherence and performance, restriction of parking and staging to designated

graveled and paved areas, measures to prevent spills of fuels or other hazardous substances, and measures to minimize turbidity, siltation, and erosion resulting from construction and maintenance activities.

CONDITION 9. Prior to ground-disturbing activities, adequate erosion and sediment control BMPs shall be installed around the periphery of all tributaries, swales, and wetlands within the construction area, and managed at least weekly to avoid sediment or other materials from entering these areas. The Applicant shall not use tightly woven fiber netting, plastic monofilament netting, or similar material for erosion control or other purposes. If soils or other materials build up along the erosion and sediment controls, these materials shall be graded away from all waterways prior to a storm event. Accumulated sediment removed from erosion and sediment controls shall be contained and not allowed to: enter any surface waters, enter sensitive habitats, or be placed at or below the OHWM.

**CONDITION 10.** Impacts to special-status bats shall be minimized with implementation of year-round sensitive species protection measures described in section 5 of the certification application. A qualified biologist shall conduct appropriate pre-construction surveys for special-status bats and Project activities shall not start until the qualified biologist determines that Project activities will not significantly affect any special-status bats.

**CONDITION 11.** Impacts to habitat or loss of nests for riparian-nesting birds shall be minimized with implementation of year-round protection measures and nesting season protection measures identified in section 5 of the certification application. These measures require pre-construction nesting bird surveys, and prohibit work within 250 feet of an active riparian bird nest.

**CONDITION 12.** To the maximum extent practicable, activities that increase the erosion potential within the Project area shall be restricted to the relatively dry late spring, summer and early fall period (approximately May 15 to October 15) to minimize the potential for rainfall events to transport sediment to surface water features. If construction activities must occur during the late fall, winter, or early spring, or the weather forecast shows a high probability of rain, temporary erosion and sediment control structures shall be in place, operational, and maintained until permanent erosion control measures (e.g., successful revegetation) are in place.

CONDITION 13. Location of spoil sites shall be free of vegetation and upland such that they do not drain directly into a surface water feature. Spoil sites shall not be located at or below the OHWM. If a spoil site has the potential to drain into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the surface water feature. After each Project activity is completed, spoil sites shall be graded and vegetated to reduce the potential for erosion. Drainage patterns shall be preserved by maintaining original land contours when possible. Spoil sites that are to remain on-site through the rainy season (October 16 to May 14 of the following year) shall be protected with appropriate BMPs to prevent erosion.

**CONDITION 14.** The Applicant shall monitor erosion control methods at all sites during the rainy season to ensure their efficacy and to ensure that erosional runoff is not occurring. Sediment control measures shall be in place prior to the onset of the first forecasted rain event or October 16, whichever comes first. Sediment control measures shall be monitored and maintained in good working condition until vegetation becomes established within the disturbed area.

**CONDITION 15.** No unset cement, concrete, grout, damaged concrete, concrete spoils, or wash water used to clean concrete surfaces shall contact or enter surface waters. No leachate from truck or grout mixer cleaning stations shall percolate into Project area soils. Cleaning of concrete trucks or grout mixers shall be performed in designated washout areas of sufficient size to completely contain all liquid and waste concrete or grout generated during washout procedures. All wash water and hardened concrete or grout shall be disposed of at an authorized landfill or other disposal site, in compliance with state and local laws, ordinances, and regulations.

**CONDITION 16.** Construction material, debris, spoils, earthen material, and any other substances from any Project-related activity shall be prevented from entering surface waters. All construction debris and trash shall be contained and regularly removed from the work area to the staging area during construction activities. At no time should construction material, debris, or trash be stored at or below OHWM. Upon completion, all Project-generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations.

**CONDITION 17.** All equipment must be washed prior to transport to Project sites and must be free of sediment, debris, and foreign matter.

**CONDITION 18.** Staging areas shall be established for all construction equipment and refueling operations to avoid pollutants from entering any surface waters or sensitive habitats. Staging areas shall be away from all surface waters, including seasonal swales and wetlands, and free of vegetation. Parking and staging shall be restricted to developed (i.e., graveled or paved) areas. Fueling of construction equipment shall be done at a fixed fueling station to reduce the area exposed to the potential for fuel spills. Secondary containment, such as a drain pan or drop cloth, shall be used to catch spills or leaks when adding, changing, or removing fluids. Spill containment materials shall be kept on-site at all times to contain any accidental spill. Absorbent materials shall be used on small spills. The absorbent material shall be promptly removed and disposed of properly.

**CONDITION 19.** On-site vehicles and equipment shall be regularly inspected for leaks and repaired immediately. If vehicle and equipment maintenance must occur on-site, it shall be done in designated areas, located away from drainage courses, to prevent the run-on of stormwater and the run-off of spills.

**CONDITION 20.** On-site containment for storage of chemicals classified as hazardous shall include secondary containment and appropriate management as specified in California Code of Regulations, title 27, section 20320.

**CONDITION 21.** All equipment and materials shall be staged and stored at a minimum setback of 50 feet from the OHWM of any stream or waterbody.

**CONDITION 22.** Rubber mats shall be placed in all stream channels where mechanical equipment requires crossing. Mechanical equipment shall only operate in the dewatered portions of the impoundment or on the stream bank.

**CONDITION 23.** Temporary sanitary facilities, if necessary, shall be installed no less than 200 feet from any stream or surface water and shall be properly maintained. All sanitary waste shall be taken off-site for disposal.

**CONDITION 24.** Riparian habitat that is damaged or removed during Project activities shall be replaced. The vegetation restoration shall occur within the area of riparian habitat disturbed by Project activities and shall be at least equal to the amount lost due to Project implementation (1:1 ratio, new plantings of vegetation greater than four-inches dbh that are destroyed). Additionally, the Applicant shall ensure that vegetation restoration is implemented as needed to achieve no net loss and long-term riparian habitat vegetation net gain.

**CONDITION 25.** Upon completion of dewatering Project activities, instream flows shall be reinstated according to the following schedule to alleviate potential impacts to fall trout spawning habitat from Project-related sedimentation:

Hours	Flow in cubic feet per second 50 100 60					
0						
1 through 12						
13 through 14						
15 through 16	36					
17 through 18	20					
19 through 20	13					
21	Minimum required bypass flow					

**CONDITION 26.** The Applicant shall take all necessary measures in pre-construction planning to minimize construction impacts to riparian habitat. Prior to construction, the Applicant shall install construction fencing along the outer edges of the construction zone, where necessary, to prevent accidental entry into riparian habitat. All stockpiling of materials and equipment shall occur well outside of riparian habitat. Upon completion of construction activities, any impacted areas within the riparian corridor shall be reseeded with native plants or grasses.

**CONDITION 27.** The Applicant shall restore any fish and wildlife habitat that is impaired or damaged either directly or incidental to routine Project activities. All exposed slopes and exposed areas on banks with erosion potential shall be seeded, mulched, and fertilized (if appropriate) with a seed mix approved by the Deputy Director, CDFW, and USFS (when on USFS land).

**CONDITION 28.** Following Project activities, areas of disturbed soil, including locations of buried pipe and areas containing excess soil, shall be secured with sterile straw mulch and seeded with a native plant mix either manually or through hydroseeding. Revegetation efforts must prevent soil erosion during the subsequent rainy season and ensure revegetation during the following growing season.

**CONDITION 29.** During Project planning activities for a given year, the Applicant shall consult with a qualified biologist to determine if impacts to sensitive biological resources are anticipated as a result of the Project activities. The biologist shall survey Project areas associated with planned activities and prepare a biological report that includes locations of sensitive areas and any recommendations for avoidance and minimization of impacts. The biologist shall report the findings and recommendations to the State Water Board, USACE, United States Fish and Wildlife Service (USFWS), CDFW, and USFS (when on USFS land).

**CONDITION 30.** The Applicant shall have a qualified biologist survey riparian areas for nesting activity no more than 30 days prior to the scheduled start date of any activity with the potential to impact nesting activity. If nesting activity is observed or if birds are observed displaying nesting/territorial behavior, the biologist shall note the location of the nest or activity, and a second survey shall be scheduled if the proposed activities may impact the nest. Active nests and nest trees shall be flagged and mapped. In the annual report, the Applicant shall provide: survey findings; associated recommendations provided by the biologist to prevent impacts and protect nesting birds; the Applicant's implementation of such recommendations; and any related information, including any observations that result in the halting of work and the action(s) or circumstance(s) that allowed for the resumption of Project activities.

During Project activities, the Applicant shall provide a qualified biologist to monitor nests or monitor nests for disturbance as described below. The monitor, if not a biologist, shall be trained by a biologist prior to the start of monitoring activities. Training shall include written information describing the monitor's role and responsibilities, including any specific direction (e.g., no heavy equipment within specified distances of identified nests). The monitor shall document and report observations to the biologist at the end of each day during which monitoring occurred. If the monitor or biologist observe disturbance, the monitor or biologist will immediately halt the work and contact the Applicant. Work associated with disturbance of a nest shall not resume without approval from the qualified biologist and any other necessary regulatory approvals.

**CONDITION 31.** A pre-construction amphibian survey shall be conducted no more than 30 days prior to initiating Project activities with the potential to impact amphibian species. The Applicant shall notify and consult with the State Water Board, CDFW, USFWS, and USFS (when on USFS land), regarding the proper survey protocol and appropriate avoidance and protection measures to prevent impacts to amphibians or their habitat during implementation of Project activities.

If special-status amphibians are observed in the work area during pre-construction surveys, CDFW and USFWS-approved biologist(s) shall be on-call throughout implementation of the Project. If special-status amphibians are found, all activities in the surrounding area that have the potential to result in harassment, injury, or death of the amphibian shall stop until an approved biologist determines that continued activities will not disturb the amphibians. The Applicant shall work with the approved biologist to document the amphibian(s) and any action(s) or circumstance(s) that allowed for the resumption of Project activities. This documentation shall be included in the Applicant's annual report to the State Water Board.

**CONDITION 32.** All workers on the construction site shall receive training on species identification, applicable BMPs, avoidance and protection measures, and certification conditions prior to beginning work. The Applicant shall monitor BMP adherence and function as needed to ensure compliance at all times. Work crews shall be restricted to designated work areas identified with brightly colored flagging.

**CONDITION 33.** All impoundments shall be monitored during dewatering procedures to ensure protection of resident fish. Rescue procedures shall be implemented in accordance with CDFW Agreement No. 1600-2008-0099-R6 and any amendments or successive agreements thereto.

**CONDITION 34.** All water quality compliance monitoring shall be conducted using the State Water Board Surface Water Ambient Monitoring Program methods and procedures described in

Code of Federal Regulations Title 40, Chapter I, Subchapter D, Part 136 (40 C.F.R. § 136), unless otherwise approved by the Deputy Director.

**CONDITION 35.** The Applicant shall provide an annual work plan to the State Water Board by April 15 of each year. The annual work plan shall detail the scheduled O&M activities planned for that year and report any findings from pre-construction surveys completed prior to preparation of the annual work plan.

**CONDITION 36.** Unless otherwise specified in this certification or at the request of the State Water Board, data and/or reports must be submitted electronically in a format accepted by the State Water Board to facilitate the incorporation of this information into public reports and the State Water Board's water quality database systems in compliance with Water Code section 13167.

**CONDITION 37.** The Applicant shall notify the State Water Board, CDFW, USACE, and USFWS prior to moving any live fish from any impoundment associated with Project activities. The Applicant shall provide personnel and equipment necessary to collect stranded fish from an impoundment as it is drained. Any stranded fish shall be collected and immediately placed in a suitable adjacent lake or waterway. The Applicant shall document the collection and relocation of stranded fish and provide documentation to the State Water Board, CDFW, USACE, and USFWS upon request.

**CONDITION 38.** The Deputy Director and the Executive Officer shall be notified one week prior to the commencement of ground-disturbing activities. Upon request, a construction schedule shall be provided to the State Water Board so staff may be present on-site to document compliance with this certification. The Deputy Director and the Executive Officer shall also be notified within one week of completion of Project activities covered by this certification.

**CONDITION 39.** The Applicant shall report any noncompliance to the conditions of this certification to the Deputy Director within 24 hours of the time when the Applicant, or its contractor or subcontractors, first become aware of the circumstances of noncompliance.

**CONDITION 40.** The State Water Board has the authority to withhold approval or to require modification of a proposal or plan prior to approval, or take enforcement action if the Applicant fails to provide or implement a required plan in a timely manner.

**CONDITION 41.** A copy of this certification shall be provided to all parties conducting work related to the Project, and copies shall remain in their possession at the Project site(s). The Applicant shall be responsible for work conducted by its contractors or subcontractors.

**CONDITION 42.** The Applicant shall submit any changes to the Project, including Project operations that would have a significant or material effect on the findings, conclusions, or conditions of this certification, to the State Water Board for review and written approval. If the State Water Board is not notified of a significant change to the Project, it will be considered a violation of this certification.

**CONDITION 43.** Notwithstanding any more specific conditions in this certification, the Project shall be operated in a manner consistent with all applicable water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality

Control Act and to section 303 of the Clean Water Act. The Applicant must take all reasonable measures to protect the beneficial uses of the Mono Lake and Owens River watersheds.

**CONDITION 44.** The Applicant is responsible for compliance with all applicable federal, state, or local laws or ordinances and shall obtain authorization from applicable regulatory agencies prior to the commencement of Project activities.

**CONDITION 45.** This certification is contingent on compliance with all applicable requirements of the Lahontan Basin Plan, except as may be modified by the specific conditions of this certification.

**CONDITION 46.** This certification is contingent on compliance with all applicable requirements of the relevant FERC license for the Project, except as may be modified by the specific conditions of this certification.

**CONDITION 47.** This certification does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (ESA) (Fish & Game Code §§ 2050-2097) or the federal ESA (16 U.S.C. §§ 1531 - 1544). If a "take" will result from any act authorized under this certification or water rights held by the Applicant, the Applicant must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Applicant is responsible for meeting all requirements of the applicable ESAs for the Project authorized under this certification.

**CONDITION 48.** In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation is subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.

**CONDITION 49.** In response to a suspected violation of any condition of this certification, the State Water Board or Lahontan Regional Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. (Wat. Code, §§ 1051, 13165, 13267, and 13383).

**CONDITION 50.** In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

**CONDITION 51.** The State Water Board reserves the authority to add to or modify the conditions of this certification to: (1) incorporate changes in technology, sampling, or methodologies; (2) if monitoring results indicate that continued operation of the Project could violate water quality objectives or impair beneficial uses; and (3) to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

**CONDITION 52.** Any requirement in this certification that refers to an agency whose authorities and responsibilities are transferred to or subsumed by another state or federal agency, will apply equally to the successor agency.

**CONDITION 53.** This certification requires compliance with all applicable requirements of the Lahontan Basin Plan. If at any time an unauthorized discharge to surface waters (including river or streams) occurs or monitoring indicates that the Project has or could soon be in violation with water quality objectives, the associated Project activities shall cease immediately and the Deputy Director and the Executive Officer shall be notified. Associated activities may not resume without approval from the Deputy Director.

**CONDITION 54.** The Applicant shall provide State Water Board and Lahontan Regional Water Board staffs access to Project sites to document compliance with this certification.

**CONDITION 55.** The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to add to or modify any of the conditions of this certification.

**CONDITION 56.** This certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code, section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).

**CONDITION 57.** This certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent application for certification was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b) and that application for certification specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

**CONDITION 58.** Certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28.

**CONDITION 59.** Nothing in this certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 claims. The State Water Board has separate authority under the Water Code to investigate and take enforcement action if necessary to prevent any unauthorized or threatened unauthorized diversions of water.

Eileen Sobeck

Executive Director

Date

OCT 0 3 2017

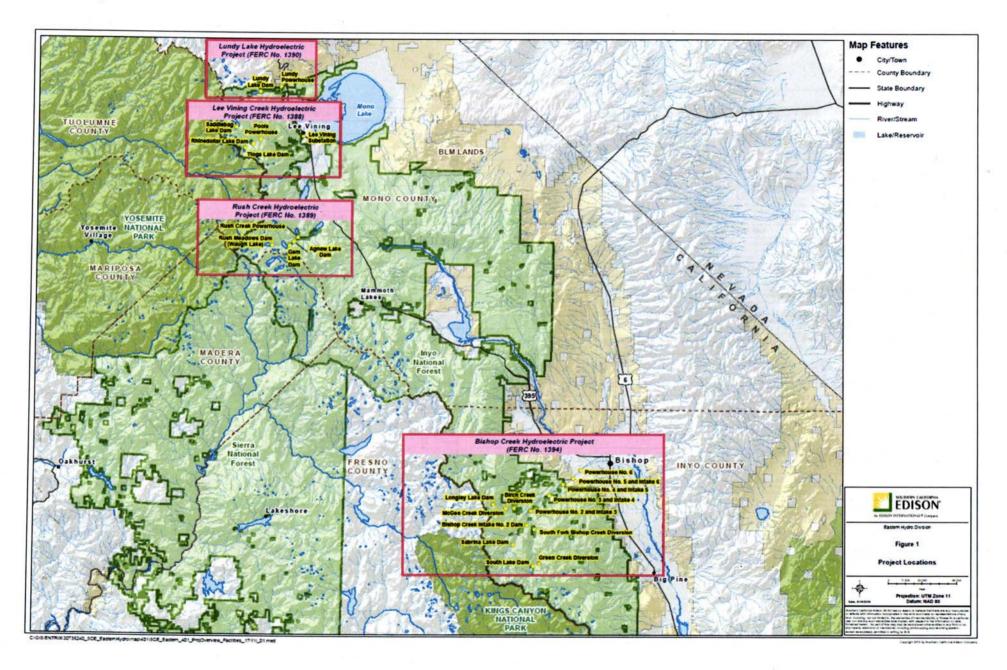
Attachment A:

**Project Map** 

Attachment B

Table 2 of Attachment 3 of Project Certification Application

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Request for Water Quality Certification

Southern California Edison Company Eastern Sierra Hydroelectric Power Projects

Table 2.1 Toject impacts (box o on the clean water Act 40) water quality certification Application 1		Table 2. Project Impacts (Box 8 on the Clean Water Act 401 Water Qua	ality Certification Application Form	ı).
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	Waterbody Name and Waterbody Type	O&M Activity	Activities Within Ordinary High Water Mark (OHWM) (Y/N)	Impact				
Location				Amount of Dredge/Excavation (cubic yards [CY])	Amount of Fill (linear feet [ft])	Amount (Acreage or Square Footage [SF]) of Vegetation Removal	Duration	Frequency
Bishop Creek Hydroelectric Project								
Green Creek Diversion Dam	Green Creek,	Sediment Bypass	Y		5		1-2 days	once every other year (or more often if needed)
		Vegetation Management	N		-	3 SF	2 days	when needed, in springtime
	Stream	Material Removal	Y	1.85	-	-	2 days	when needed, in springtime
		Facilities Repair	Y	-	-	5 SF	1 day	when needed, in springtime
		Sediment Bypass	Y		-	-	1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Y		-		1 day	monthly
South Fork Bishop Creek - South Lake Dam	Bishop Creek, Stream	Vegetation Management	N		-	10 SF	2 weeks	when needed, in springtime
		Material Removal	Y				2 weeks	when needed, in springtime
		Facilities Repair	Y	-	-	7 SF	1 day	when needed, in springtime
McGee Diversion Birch McGee		Sediment Bypass	Y	-	6	-	1-2 days	once every 5-10 years
	McGee Creek, Stream	Sediment Bypass - Gate Maintenance	Y		54		1 day	sluice routinely and clean out with equipment annually (Birch McGee Intake); monthly (two birch McGee flowline sand traps, and McGee Creek Intake)
		Vegetation Management	N			5 SF	1 day	when needed, in springtime
		Material Removal	Y	2.67	-	20 SF	1 day	when needed, in springtime
		Facilities Repair	Y		-	12 SF	1-2 days	when needed, in springtime or summer
	Birch Creek, Stream	Sediment Bypass - Gate Maintenance	Y	-	-	-	1 day	monthly
Birch Creek Diversion Intake 2		Vegetation Management	N			1 acre	1 day	when needed, in springtime
		Material Removal	Y	29.63	-		1 day	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Y	-	20	-	2 days	when needed 1-2 times per year
		Penstock Inspections	Y				1 day	every 5 years (requires drawing down reservoir only)
	Bishop Creek, Stream	Sediment Bypass	Y		135	-	1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Y		27	-	1 day	monthly
Bishop Creek South Fork Diversion Dam		Vegetation Management	N		-	15 SF	2 days	when needed, in springtime
		Material Removal	Y	222.22			2 days	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Y		20	-	1 day	when needed, in springtime
	Bishop Creek, Stream	Sediment Bypass	Y		30		1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Y		20	-	1 day	monthly
Birhan Crook - Rowarhouro No. 2 and Intole 2		Vegetation Management	N		-	50 SF	2 days	when needed, in springtime
Bishop Creek - Powerhouse No. 2 and Intake 3		Material Removal	Y	5925.93		-	2 days	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Y	-	-	-	1 day	when needed, in springtime
		Penstock Inspections	Y			_	1 day	every 5 years (requires drawing down reservoir only)

September 2015

Request for Water Quality Certification

Southern California Edison Company Eastern Sierra Hydroelectric Power Projects

	Waterbody Name and Waterbody Type	O&M Activity	Activities Within Ordinary High Water Mark (OHWM) (Y/N)	Impact				
Location				Amount of Dredge/Excavation (cubic yards [CY])	Amount of Fill (linear feet [ft])	Amount (Acreage or Square Footage [SF]) of Vegetation Removal	Duration	Frequency
Bishop Creek Hydroelectric Project (con	tinued)							
Bishop Creek - Powerhouse No. 3 and Intake 4		Sediment Bypass	Y	-	40	-	1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Y	-	30	-	1 day	monthly
	Bishop Creek,	Vegetation Management	N		-	150 SF	2 weeks	when needed, in springtime
bishop creek - Fowerhouse No. 3 and make 4	Stream	Material Removal	Y	13333.33	-	-	2 weeks	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Y	-		-	1 day	when needed, in springtime
		Penstock Inspections	Y	-	-	-	1 day	every 5 years (requires drawing down reservoir only)
		Sediment Bypass	Y	-	40	-	1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Υ	-			1 day	monthly
Sinhan Carab. Danishasian No. 4 and lataba E.	Bishop Creek,	Vegetation Management	N	-	-	150 SF	2 weeks	when needed, in springtime
Bishop Creek - Powerhouse No. 4 and Intake 5	Stream	Material Removal	Y	7407.41	-	-	2 weeks	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Υ	-	-	20 SF	1 day	when needed
		Penstock Inspections	Y	-	-	-	1 day	every 5 years (requires drawing down reservoir only)
	6 Bishop Creek, Stream	Sediment Bypass	Y	-	40	-	1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Y	-		-	1 day	monthly
Sinhan Carab Carabana Na Faradataba 6		Vegetation Management	N	-	-	150 SF	2 weeks	when needed, in springtime
Bishop Creek - Powerhouse No. 5 and Intake 6		Material Removal	Y	4444.44	-	-	2 weeks	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Y	-	-	0.25 acre	1 day	when needed
		Penstock Inspections	Y	-		-	1 day	every 5 years (requires drawing down reservoir only)
	Bishop Creek, Stream	Sediment Bypass	Y	-	-	-	1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Y	-	-	-	1 day	monthly
Bishop Creek - Powerhouse No. 6		Vegetation Management	N	-	-	20 SF	1 day	when needed, in springtime
		Material Removal	Y	11.11	-	20 SF	1 day	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Y	-	15	20 SF	2 days	when needed
Malaus Dilah	Bishop Creek, Stream	Vegetation Management	N		-	2 acres	3 weeks	annually
Abelour Ditch		Material Removal	Y	2370.37	-	-	4 weeks	once every 5 years
Rush Creek Hydroelectric Project								
	Rush Creek, Stream	Sediment Bypass	Y	-	-	-	1-2 days	once every other year (or more often if needed)
		Vegetation Management	N		-	2 acres	2-3 weeks	when needed, in springtime
Agnew Lake Dam		Material Removal	Y	-	-	-	2-3 weeks	when needed, in springtime (sediment removed once every 5-10 years)
		Facilities Repair	Y	-		-	1 day	when needed
		Penstock Inspections	Y				2 days	every 5 years (requires draining of reservoir)
Gem Lake Dam	Rush Creek, Stream	Penstock Inspections	Υ	-	-	-	1 week	every 5 years (requires draining of reservoir)
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September 2015

Request for Water Quality Certification

Southern California Edison Company Eastern Sierra Hydroelectric Power Projects

Table 2. Project Impacts (Box 8 on the Clean Water Act 401	Water Quality Certification Application Form) (continued).
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Location	Waterbody Name and Waterbody Type	O&M Activity	Activities Within Ordinary High Water Mark (OHWM) (Y/N)	Impact				
				Amount of Dredge/Excavation (cubic yards [CY])	Amount of Fill (linear feet [ft])	Amount (Acreage or Square Footage [SF]) of Vegetation Removal	Duration	Frequency
Lee Vining Hydroelectric Project								
Glacier Creek below Tioga Lake Dam (spillway downstream - no work in reservoir or upstream dam)		Sediment Bypass	Y	-	1		1-2 days	once every other year (or more often if needed)
	Glacier Creek,	Vegetation Management	N	-	-	5 SF	1 day	when needed, in springtime
	Stream	Material Removal	Y	46.3	-	-	1 -2 days	when needed, in springtime (sediment removed once every 2-5 years)
		Facilities Repair	Y	-	1	-	1 day	when needed
		Sediment Bypass	Y	-	1	-	1-2 days	once every other year (or more often if needed)
	Lee Vining Creek, Stream	Vegetation Management	N	-	1	0.25 acre	1 day	when needed, in springtime
Rhinedollar Lake Dam (spillway downstream - no work in reservoir or upstream of dam)		Material Removal	Y	-	-	-	1 day	when needed, in springtime
,		Facilities Repair	Y	-	15	5 SF	1 day	when needed
		Penstock Inspections	Y	-	-	_	unknown	every 5 years (requires draining of reservoir)
Lundy Hydroelectric Project								
	Mill Creek, Stream	Sediment Bypass	Y	-	-	-	1-2 days	once every other year (or more often if needed)
Lundy Lake Dam and Mill Creek below Lundy		Sediment Bypass - Gate Maintenance	Y	-	200	-	1 day	monthly (every 6 months for Farmers Gate)
		Vegetation Management	N	-	-	1 acre	1 day	when needed, in springtime
Lake (Farmers Gate maintenance and spillway downstream)		Material Removal	Y	5.56	-	10 SF	1 day	when needed, in springtime
		Facilities Repair	Y	5.56	-	0.25 acre	2 days	when needed
		Penstock Inspections	Y	-	1	-	1 week	every 5 years (requires draining of reservoir)
	Mill Creek, Stream	Sediment Bypass	Y	-	1500	-	1-2 days	once every other year (or more often if needed)
		Sediment Bypass - Gate Maintenance	Y	-	-	-	1 day	monthly
Lundy Powerhouse Tailrace and Return Ditch		Vegetation Management	N	-	1	1 acre	1 day	when needed, in springtime
		Material Removal	Y	2592.59		1 acre	1 day	when needed, in springtime (sediment removed once every 1-3 years in the tailrace, and when no flows are present in the return ditch)
		Facilities Repair	Y	-	-	1 acre	1 day	when needed

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