File Code: 2770                                       Date: October 31, 2017

Subject: Southern California Edison Company, Kern River 3 Hydroelectric Project, Adit 19-20 Road Repair

To: District Ranger, Kern River

From: KEVIN B. ELLIOTT, Forest Supervisor

I am authorizing Southern California Edison Company (SCE) to perform the work necessary to make repairs to restore the dirt access road to Adits 18-19 and 19-20 on the KR3 Project flowline. The winter storms of 2016-2017 resulted in damage to approximately 1,435 feet of access road. Runoff from the storms caused blockage and overtopping of several culverts along the access road.

I have determined that the repair of the road access is necessary for the safe and efficient operation of the KR3 hydroelectric project, as provided in the FERC license.

This is not a project or activity implementing a land and resource management plan that is documented in a decision memo, decision notice, or record of decision. There are no extraordinary circumstances that would necessitate an environmental impact statement or an environmental assessment.

This activity is applicable to the categories of actions excluded from documentation established by the Chief. The applicable category is found in Forest Service Handbook 1909.15, 32.12, within the categories identified in 36 CFR 220.6(d)(3) – Repair and maintenance of administrative sites and 36 CFR 220.6(d)(4) Repair and maintenance of roads, trails, and landlines. These activities are authorized by SCE’s FERC license and are consistent with hydroelectric project operations and maintenance activities as described in the FERC license.
Name of Project: Adit 19-20 Road Repair
Location: T 24 S, R 33 E, Section 17 (Figures 1 and 2)

Introduction: Southern California Edison (SCE) owns and operates the Kern River No. 3 (KR3) Hydroelectric Project, FERC Project No. 2290 (KR3 Project) located near the town of Kernville in Tulare and Kern Counties, California. The KR3 Project was re-licensed by the Federal Energy Regulatory Commission (FERC) in 1997. Adit 19-20 Road is located within the Sequoia National Forest, and within the FERC Boundary of the KR3 Project (Figure 1).

Purpose and Need: The purpose of the Project is to restore the unimproved (dirt) access road that accesses Adits 18-19 and 19-20 on the KR3 Project flowline. Reestablishing vehicle access to the Project adits is necessary for the safe and efficient operation of the KR3 Project, as provided for in the FERC license. During recent storm events, the volume of the creek adjacent to the road increased dramatically and overtopped a culvert beneath the road, severely eroding and rutting approximately 1,500 feet of the road (Figures 5 through 7).

Proposed Action: SCE requests approval to restore the Adit 19-20 access road following damage from recent storm events in the winter of 2016-17 (Figures 5 through 7). Approximately 1,435 feet of the road was severely eroded when above average precipitation caused high run off that resulted in the blockage and overtopping of several culverts along the access road. The section of road to be repaired begins at culvert #58, and extends downstream (northwest) for approximately 1,435 feet. Four culverts (at three road crossings) are included in the work area, these include Culvert #58/58A, 57 and 56.

A description of the proposed work, including culvert maintenance, road grading and installation of permanent drainage structures (i.e., water bars) is provided in the attached Inspection Report. Repair recommendations presented in this report are following a meeting of interdisciplinary scientists, resource managers and engineers from SCE and the USFS on October 11, 2017. Repair recommendations include installation of fifteen (15) side discharge drivable water bars to convey water off the road bed and into the adjacent waterway. Grading will also include a 2 percent cross slope to an inboard ditch on either road side. Erosion damage on the existing road way will be filled and graded. Larger gullies in the road (deeper than one foot) will be filled with coarse material from the Corral Creek Flume A Tunnel Muck borrow site. Finer material will be used to fill shallower rills, and for the finished road surface, and will be imported from Fairview Heliport borrow site. Both of these locations have been previously approved as borrow sites by the U.S. Forest Service (Figure 2 and 4). Culverts 56, 58 and 58A will be re-aligned and extended, and >12-inch rock used to armor the inlet, as needed. Likewise the discharge point of the inboard ditch at water bar 15 will be armored with >12-inch rock. Rock will be sourced from approved borrow sites, and/or scavenged from the surrounding area; no material will be removed from the stream channel.

An existing turn out located at the downstream end of the damaged road section will be used as a staging area for equipment and fill material (Figure 3). Vegetation directly adjacent to the culverts, and currently growing in or directly adjacent to the road way would be trimmed or removed as needed.

Work would be completed by a 2-person crew operating a dump truck and a grader or similar equipment. Work would take approximately four weeks to complete and will be initiated immediately upon approval. Work activities will be restricted to clearly defined existing access roads, staging areas and borrow sites. The work is not expected to impact nesting birds because the majority of the work will be confined to developed areas within the existing road prism and only vegetation directly adjacent to the culverts and the road way would be removed or trimmed. Additionally, the work is scheduled for fall-winter of 2017, prior to the onset of the nesting bird season in February.

Cultural Resources: The Area of Potential Effect (APE) includes portions of the Corral Creek Road and Adit 19-20 Road, which were surveyed in January 2008, and in November 2009. Eight archaeological sites and one historic district have been identified at least partially within the APE. All of these resources have been formally evaluated for listing on the National Register of Historic Places (NRHP). Two resources (05-13-54-710 and 05-13-54-721) and the historic district (FS 05-13-56-22) has been determined eligible for listing on the NRHP. The flowline components to this district will be avoided since they are not located within the road prisms proposed for maintenance. The remaining sites within the APE were determined not eligible for the NRHP. The California State Historic Preservation Officer (SHPO) concurred with these findings on November 13, 2012 (FERC120832A). The two identified historic properties have artifacts, artifact concentrations, or features that are situated adjacent to the APE and, as such, will be avoided by the proposed road grading and repair activities. The Corral Creek Flume A Tunnel Muck borrow site is located within resource 05-13-54-710. Resource 05-13-54-710 is the remains of KR3 Construction Camp 4 which contains waste rock piles, associated scattered metal and wood debris, remnants of a concrete structure spanning the creek, tent pads and a prehistoric rock shelter and rock art panel. The waste rock piles (tunnel muck) were determined to not be a contributing portion of the site. All other elements of this site will be avoided by the proposed road grading and repair
activities. SCE will utilize these waste rock piles as fill for larger rills and gullies along Adit 19-20 Road (i.e., Corral Creek Flume A Tunnel Muck borrow site).

SCE concludes that the proposed work will have no adverse effect on historic properties. To ensure that the resources that are located adjacent to the road prism are protected from indirect effects from the undertaking, an archaeological monitor will flag areas to be avoided, inform crews of avoidance areas and spot check road grading activities. The cultural monitor will also be present during any scavenging of local rock to be used in arorning inlet and outlet structures.

With the implementation of these measures, the ground disturbance associated with the proposed maintenance work will have no adverse effect on historic properties since all work will be conducted in areas that have been previously disturbed, and all work will be conducted and staged from existing roads.

**Purpose of Checklist:** For projects categorically excluded under NEPA that do not require a decision memo, this checklist documents that there are no extraordinary circumstances related to the proposed action that warrant further analysis and documentation in an environmental assessment or environmental impact statement.

### Applicable Categorical Exclusions for Projects Not Requiring a Decision Memo

For full description of each category and examples refer to FSH 1909.15, Chapter 30.

<table>
<thead>
<tr>
<th>32.11 Categories Established by the Secretary (7 CFR 1b.3)</th>
<th>32.12 Categories Established by the Chief (36 CFR 220.6(d))</th>
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<tbody>
<tr>
<td>(1) Policy admin. development/planning</td>
<td>(1) Prohibit for resource protection</td>
</tr>
<tr>
<td>(2) Activities related to funding/money</td>
<td>(2) Admin procedures, processes, instructions</td>
</tr>
<tr>
<td>(3) Inventories, research activities, studies</td>
<td>(3) Repair/maintain Admin. Sites</td>
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<tr>
<td>(4) Educational and information activities</td>
<td>(4) Repair/maintain roads, trails, landlines</td>
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<tr>
<td>(5) Law enforcement and investigation</td>
<td>(5) Repair/maintain Rec. Sites/Facilities</td>
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<td>(6) Advisory or consultative activities</td>
<td>(6) Acquisition of land or interest in land.</td>
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<tr>
<td>(7) Trade representation/market develop</td>
<td>(7) Sale or exchange of land with same land use</td>
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<td></td>
<td>(8) Approve/modify/continue less than 1 year Special Use Permit</td>
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<td></td>
<td>(9) New Permit for existing ski area for administrative changes only</td>
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<tr>
<td></td>
<td>(10) Amend/Replace existing Special Use Permit for administrative changes only</td>
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</tbody>
</table>

#### 32.3 Categories Established by Statute

- 42 USC 15942- Oil and Gas Leases
- 16 USC 6554(d) – Applied Silvicultural Assessments

#### 32.4 Statutory NEPA Exception

- 16 USC 6231 – Organization Camp Special Use Authorization

### Determination of Extraordinary Circumstances for the Proposal 36 CFR 220.6(a)

<table>
<thead>
<tr>
<th>Resource Conditions 36 CFR 220.6(b)</th>
<th>Resource Condition Present?</th>
<th>For Resource Conditions that are Present, the following Findings are made:</th>
<th>Reference material used to support finding of no extraordinary circumstance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species</td>
<td>Yes</td>
<td>No federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species will be adversely affected by this proposal. No extraordinary circumstances exist for this resource condition.</td>
<td>The nature of the work is not expected to disturb nesting birds. Work will be restricted to developed areas and vegetation impacts will be limited to minor trimming and/or removal of vegetation immediately adjacent to culvert inlets and the existing road prism.</td>
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<tr>
<td>Resource Type</td>
<td>Affected Condition</td>
<td>Impacted Area</td>
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<tr>
<td>(2) Flood plains, wetlands, or municipal watersheds;</td>
<td>No floodplains, wetlands or municipal watersheds will be adversely affected by this action. No extraordinary circumstances exist for this resource condition.</td>
<td>All culvert maintenance would be in-kind within the existing configuration; there would be no alteration of the streambed. No rock or debris will be left within the streambed that could potentially block or divert flows.</td>
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</tr>
<tr>
<td>(3) Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas;</td>
<td>No Congressionally designated areas such as wilderness, wilderness study areas, or national recreation areas; will be adversely affected by this action. No extraordinary circumstances exist for this resource condition.</td>
<td>The Project area is not located within any Congressionally designated areas.</td>
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<tr>
<td>(4) Inventoried roadless areas or potential wilderness areas;</td>
<td>IRAs will not be adversely affected by this action. No extraordinary circumstances exist for this resource condition.</td>
<td>The Project area is not located within any IRAs.</td>
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<tr>
<td>(5) Research natural areas;</td>
<td>RNAs will not be adversely affected by this action. No extraordinary circumstances exist for this resource condition.</td>
<td>The Project area is not located within any RNAs.</td>
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<td>(6) American Indians and Alaska Native religious or cultural sites, and</td>
<td>Implementation of the Proposed Action would not adversely affect American Indian religious or cultural sites. No extraordinary circumstances exist for this resource condition.</td>
<td>The Project been reviewed by the Forest Archaeologist and District Archaeologist on 10/11/17. No American Indian Cultural resources of religious significance are located in the Project area.</td>
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</tr>
<tr>
<td>(7) Archaeological sites, or historic properties or areas.</td>
<td>No archeological sites or sites eligible for National Historic Register listing will be adversely affected by this proposal. No extraordinary circumstances exist for this resource condition.</td>
<td>The Project been reviewed by the Forest and District Archaeologist. Use of in-kind materials and construction techniques would not pose an adverse effect to historic properties in the Project area. All historic resources would be properly identified and avoided during road work.</td>
<td></td>
</tr>
</tbody>
</table>

I have considered the above listed resource conditions and determined there are no extraordinary circumstances related to the proposed action that warrant further analysis and documentation in an EA or EIS. None of the extraordinary circumstances described in 36 CFR 220.6 (b) exist.

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Signature: [signature]

KEVIN B. ELLIOTT
FOREST SUPERVISOR

Date: 1 Jan 2017
Figure 1. Project Regional Location
Figure 2. Project Vicinity
Figure 3. Project Area

- Proposed Gate
- Existing Access Road
  - Damaged Section of
  - Adit 19/20 Access Road
- Temporary Staging Area

Adit 19/20 Road Repair
Figure 5. Erosion Damage to Adit 19/20 Access Road, Looking Southeast
Figure 6. Erosion Damage to Adit 19/20 Access Road, Looking Northwest
Figure 7. Erosion Damage to Adit 19/20 Access Road, Looking Northwest.
INSPECTION REPORT – REPAIR RECOMMENDATIONS

Date: July 6, 2017; updated October 11, 2017; revised per USFS comment October 26, 2017
Project: Kern River No. 3, FERC Project No. 2290
Item: Evaluation of SCE Adit 19-20 Access Road Damage

BACKGROUND
During the 2016-2017 winter period, multiple large storms caused excessive runoff and subsequent erosion of approximately 1,500 feet of SCE Adit 18-19 and 19-20 access road for the Kern River No. 3 Hydroelectric Project. The Adit access road is located approximately 12 miles north of Kernville, to the east of Mountain Hwy 99 (see Figure 1 below). It provides access to the Kern River No. 3 tunnel sections 18, 19, and 20.

Figure 1: General Aerial Image of SCE Kern River 3 Adit 18-19 & 19-20 Access Roads

ROAD DAMAGES
The section of the road damaged by high runoff runs parallel and intersects in multiple locations with a natural stream channel that provides drainage of the area. This drainage is typically dry and only moves
water during storm events and short runoff periods after storm events. The road damage appears to have started at the "Y" split in the access road between Adit 18-19 and Adit 19-20 roads. At that location there is a 24" and 12" culvert (culvert #58 and 58A) that appear to have been clogged by debris/high flows and overtopped. As shown in Figure 2, runoff flows continued downstream entering the road in one location and overtopped two additional 24" culverts (culverts #57 and 55). The majority of the storm runoff from the area appears to have been captured and concentrated to the road surface, causing erosion for approximately 1,500' to a point where the road turns abruptly west, and the runoff water dropped back into the natural drainage channel.

![Figure 2: Storm Damage to SCE Kern River 3 Adit 18-19 & 19-20 Access Roads](image)
RECOMMENDED REPAIRS

The road damages appear to have stemmed from debris and high flows blocking the uppermost culverts in the area (culverts 58 and 58A), redirecting runoff water to areas that were not constructed with secondary means to discharge water from the road way, then cascading downstream impacting two additional culverts and causing erosion to the access road until the runoff found the least path of resistance to return to the natural channel. The recommended approach to repair the road is as follows and as shown in Figure 3A & 3B on the following pages. This has been updated since the onsite meeting with USFS on 10/11/17.

1. Clean all debris and granular material out of the existing culverts and intake area of the culverts.
2. Re-align and extend culverts 56 & 58/58A as shown in Figure 3A to accept stream flows in a more direct manner, reducing potential for debris blockage. Place 12” (minimum size) native rock at the inlets to assist in directing water to the culverts and to armor the road bed. The 12” + native rock for culvert inlet armoringle shall be imported from the approved borrow site at Corral Creek Flume A, or scavenged from the surrounding terrain. No material shall be removed from the channel.
3. Trim and/or remove adjacent vegetation near the culverts, including any woody debris upstream that could potential block the culverts in the future.
4. Fill the erosion damage on the existing road bed with imported tunnel muck from local Forest Service approved borrow sites at Corral Creek Flume A.
5. Construct side discharge drivable water bars (rolling humps/dips) with tunnel muck material at the locations shown on Figure 3A & 3B and flagged in the field on 10/11/17. In the event the culvert is ever blocked again by debris, these drainage features provide means to discharge the water back into the natural channel.
6. Place 12’+ native rock at (or immediately downstream) of the outlet of water bar 15, where water re-enters the main channel form the inboard ditch. The 12” + native rock shall be imported from the approved borrow site at Corral Creek Flume A, or scavenged from the surrounding terrain. No material shall be removed from the channel.
7. Grade the road with a 2% cross slope to an inboard ditch on one side and side discharge as shown on Figure 3.
8. Finish the road surface with fine grade material available at the Forest Service approved Fairview Heliport borrow site.
9. An archaeological monitor shall be present when/if construction material is scavenged from the surrounding area. Material sourced from the approved borrow sites would not require monitoring.

In addition to the above physical repairs, SCE will perform storm patrols prior to expected high flow events to ensure the primary means to direct water, the existing culverts, remain clear and functional. The addition of the side discharge water bars will provide the secondary means to redirect water to the natural drainage.