

FINDING OF NO SIGNIFICANT IMPACT
Southern California Edison's Eldorado-Lugo-Mohave Series Capacitor Project
(ELM) in Mojave National Preserve
National Park Service, Department of the Interior
Mojave National Preserve

INTRODUCTION

This Finding of No Significant Impact (FONSI) has been prepared, in accordance with the National Environmental Protection Act (NEPA), for Southern California Edison's Eldorado-Lugo-Mohave Series Capacitor Project (ELM) in Mojave National Preserve, San Bernardino, California, and Environmental Assessment (EA). The FONSI, along with the EA and Errata Sheet, comprise the complete record of environmental impact analysis for the project.

This document describes the Selected Alternative and provides a brief explanation of why it will have no significant effects on the human environment (CFR Title 41 § 1500-1508). With the Selected Alternative of the EA, Southern California Edison (SCE) can ensure reliable connection and integration of multiple renewable and non-renewable energy generation projects in the Southern Nevada/Eastern California area onto the electric grid, and prevent thermal overloading on the Eldorado-Lugo-Victorville 500 kV Transmission Lines which are jointly owned by SCE and Los Angeles Department of Water and Power. The Eldorado-Lugo-Mohave 500 kV Transmission Lines traverse the length of Mojave National Preserve (Preserve) and extends beyond its eastern and western boundaries onto Bureau of Land Management lands in California and Nevada.

PURPOSE AND NEED FOR ACTION

The purpose of the action is to reliably interconnect and integrate multiple renewable and non-renewable generation facilities in southern California and southern Nevada. The intent of the EA is to analyze those impacts to the natural and cultural resources of federal lands in southern California and southern Nevada. The analysis determines whether federal agencies will allow continued operation of the transmission lines across their lands – for the Bureau of Land Management to renew and amend three right-of-way (ROW) grants; for the Bureau of Reclamation to issue a right-of-use; and for the National Park Service, to issue a right-of-way permit.

ALTERNATIVES

Selection of the Preferred Alternative

The NPS selects Alternative 1 for implementation. The NPS will issue a special use permit for construction in Mojave National Preserve. The project area spans 48.0 miles in the Preserve, plus an additional 184.5 miles both west and east of the preserve's boundaries. The Selected Alternative achieves SCE compliance with Western Electric Coordinating Council planning criteria and National American Electric Reliability Corporation standard PRC-012-1 Requirement 1.3.

In the Preserve, the project area includes impacts to transmission tower sites (3.36 acres of temporary impact); pulling-tensioning-stringing sites (10.11 acres temporary impact); four helicopter landing zones (4.36 acres of temporary impact); 24 optical ground wire modification poles and two guard poles at two fiber optic repeater sites (0.11 acres of permanent impact, 2.37 acres of temporary impact). The Proposed Action would temporarily impact 21.96 acres and permanently impact 0.20 acres in the Preserve. Project components on lands in Mojave National Preserve include:

1. Modification of an 18.5' variance on one transmission tower to correct overhead discrepancies;
2. Geotechnical investigations and installation of two fiber optic repeater facilities;
3. At each repeater site, installation of electric distribution line and distribution poles (16 at the Kelbaker repeater, 8 at the Lanfair repeater), and underground conduit and telecommunications wiring from the transmission line and each repeater;
4. Removal of overhead ground wire, tower modifications, and installation of optical ground wire (OPGW);
5. Modifications to the Cima Substation on SCE land in the Preserve; and
6. If required by engineering studies, installation of cathodic protective measures where the transmission lines run parallel to existing underground natural gas pipeline owned by Southern California Gas Company.

Construction activities include temporary Best Management Practices (BMPs), project and contractor equipment and material storage areas, office trailers, portable toilets/restroom, water tanks, generators, lighting, helicopter landing areas, fueling stations, fencing, roll-off trash container, vehicle parking, equipment repair areas, tool storage trailers, onsite security, and security camera system. They may also include contractor equipment/materials delivery and storage, as required; grading activities to improve existing access roads and site preparation; removal of existing hardware and wires; installation of OPGW, ADSS, and OFNR cable; installation, maintenance, and removal of guard poles and other permit-related requirements; splicing OPGW; material salvage, disposal, and recycling; underground construction activities; and operation of construction equipment and vehicles, including helicopters. Construction would generally occur between 7:00 am and 7:00 pm each day.

Other Alternatives Considered

The No Action Alternative proposed to maintain the status quo. SCE's Eldorado-Lugo-Mohave 500 kV Transmission Line would not be upgraded; no associated improvements would be constructed. The National Park Service would issue a right-of-way permit for SCE to continue operation of its existing transmission facilities on Mojave National Preserve lands.

Decision Rationale

The Selected Alternative meets the purpose and need of the project while preserving existing Preserve resources. Transmission lines are part of essential critical infrastructure. SCE can continue to provide reliable electric transmission to the energy grid. Simultaneously, the NPS can provide maximal protection to the natural and cultural resources of Mojave National Preserve. The No Action alternative would not mitigate potential vulnerabilities to the power grid.

Why the Selected Alternative Will Not Have a Significant Effect on the Human Environment

NEPA regulations define significance as requiring the consideration of both the context and intensity of an action (40 CFR 1508.27):

- (a) Context includes geography, baseline conditions, affected interests, agency mandate, and duration and timing.
- (b) Intensity refers to the severity of impact.

The following 10 criteria are included in the Council on Environmental Quality's NEPA regulations definition of the term "significantly" (40 CFR 1508.27) and were used to determine if the Selected Alternative will result in significant effects.

Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect may be beneficial.

The Selected Alternative allows the project proponent, SCE, to maintain and upgrade its transmission lines, as specified in the Preserve' enabling legislation, the California Desert Protection Act of 1994. It will also have beneficial impacts on the resources in and adjacent to the project area by deterring potential thermal overload of the transmission lines and thereby reducing the potential for wildfire. Ecosystems native to the eastern Mojave Desert will retain values such as desert bighorn sheep habitat and migration corridors, and desert tortoise habitat – in particular, critical habitat as defined in the Desert Tortoise Recovery Plan (revised 2011, US Fish & Wildlife Service). The limited but permanent intrusion of high-voltage transmission lines and the considerable, if temporary, disturbance associated with construction is counterbalanced by the long-term benefits of ELM – improved reliability to the electric grid and reduced risk of thermal overloading and potential associated wildfires.

The degree to which the Selected Alternative affects public health and safety.

The Selected Alternative will reliably interconnect and integrate multiple renewable and non-renewable generation facilities in eastern California and southern Nevada. Improved reliability of the power grid will ensure improved public health and safety both in Mojave National Preserve and for the greater good. Transmission line upgrades will allow SCE to perform a certain action (i.e., generation tripping) during unanticipated line losses. At the completion of construction, SCE will have met Western Electric Coordinating Council planning criteria and National American Electric Reliability Corporation standard PRC-012-1 Requirement 1.3.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The Selected Alternative would not result in impacts within, or in proximity to wetlands, wild and scenic rivers, or prime farmlands. Mojave National Preserve has a varied landscape of sand dunes, mountain ranges, dry lakebeds, lava flows, cinder cones, Joshua tree forests, and far-reaching vistas. The Preserve is known for its extremely dark night skies. The NPS continues to permit cattle grazing in the Preserve, a land use that dates back to the 19th and early 20th centuries; the ELM project area traverses an active grazing allotment in Clipper Valley. The Lugo-Mohave 500kV transmission line corridor enters the Preserve at Devils Playground, crosses through Providence Mountains, Clipper Valley, and Fenner Valley. The majority of the corridor crosses through Category I critical habitat for the desert tortoise (*Gopherus agassizii mohavensis*). The ELM project is unlikely to affect numerous historic sites due to their remoteness from the project area.

Wilderness and Wilderness Character

The 1994 CDPA, which established the Preserve, also designated nearly half of the land area in the Preserve (804,949 acres) as wilderness. The NPS manages the “Mojave Wilderness” in accordance with the 1964 Wilderness Act, the CDPA, NPS *Management Policies 2006*, and DO-41: *Wilderness Stewardship*. The Mojave Wilderness is bordered by the BLM’s Kelso Dunes Wilderness Area and Bristol Mountains Wilderness Area to the west.

SCE’s Eldorado-Lugo-Mohave 500 kV Transmission Line corridors lie between, but are excluded from, designated wilderness areas. The ROW access road and most of the spur roads to each transmission tower, lie within a 180’-wide Eldorado-Lugo corridor and 160’-wide Lugo-Mohave corridor. ELM construction is contained within the existing corridors and will not cross beyond corridor boundaries into wilderness.

The degree to which the effects on the quality of the human environment are likely to be highly controversial.

No highly controversial effects were identified during preparation of the EA or during the public scoping and EA review periods.

The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

No highly uncertain, unique, or unknown risks were identified during preparation of the EA or during the public scoping and review periods.

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Selected Alternative does not establish an NPS precedent for future actions with significant effects or represent a decision in principle about a future consideration. It allows the NPS to follow precedent previously set by the 1994 California Desert Protection Act which allows for SCE to operate, maintain, and upgrade existing transmission lines in Mojave National Preserve. The Selected Alternative will not result in significant effects from a future action.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The impacts of the Selected Alternative on each impact topic were identified in the EA. Cumulative impacts on each impact topic were also identified; none will have cumulatively significant effects.

The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

Impacts to all known cultural resources shall be avoided through implementation of BLM management conditions and Cultural Resource Management Plan. Where the project area overlaps with areas sensitive for the presence of buried and currently unknown resources, monitoring will be required, and any resources discovered shall be treated appropriately. Within Mojave National Preserve, prehistoric and historic cultural resources identified by survey lie outside of both the project work areas and the Area of Potential Effect (APE). Therefore, the Selected Alternative will not result in impairment to the Preserve's cultural resources.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Approximately half of the Preserve's area is designated critical habitat for the federally threatened Mojave Desert tortoise (*Gopherus agassizii*). Construction activity in desert tortoise habitat during active season (March 1 through October 31) and during active periods (early mornings and late afternoons during active season) will require onsite biological monitors and enforcement of protective measures as described in the Programmatic Biological Opinion for Activities in the Mojave National Preserve, San Bernardino County, California issued to by the US Fish and Wildlife Service (August 7, 2019).

As discussed above, about half of the Preserve's area is designated as wilderness and half is designated as critical habitat for the federally threatened Mojave Desert tortoise (*Gopherus agassizii*). The Eldorado-Lugo-Mohave 500 kV Transmission Lines cross through desert tortoise critical habitat in the Kelso Dunes vicinity of Devils Playground, Providence Mountains, Clipper Valley, and Fenner Valley. Construction activity in desert tortoise habitat during active season (March 1 through October 31) and during active periods (early mornings and late afternoons during active season) will require onsite biological monitors and enforcement of protective measures as described in the Programmatic Biological Opinion for Activities in the Mojave National Preserve, San Bernardino County, California issued to by the US Fish and Wildlife Service (August 7, 2019).

Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Selected Alternative violates no federal, state, or local environmental protection laws.

PUBLIC INVOLVEMENT AND AGENCY CONSULTATION

Scoping

Beginning in June 2016, SCE initiated discussions with the Bureau of Land Management, National Park Service, Bureau of Reclamation, US Fish and Wildlife Service, and California Department of Fish & Wildlife regarding several major construction projects to upgrade the electric grid. The BLM took on the role of lead federal agency for NEPA and NHPA compliance. Through a Memorandum of Understanding, the NPS Mojave National Preserve agreed to become a cooperating agency. Interagency cooperation was facilitated by bi-weekly conference calls to complete National Historic Preservation Act, Section 106 consultation; Endangered Species Act, Section 7 consultation; and the National Environmental Policy Act Environmental Assessment pathway.

The Bureau of Land Management initiated the EA process by assigning a NEPA number, DOI-BLM-CA-D080-2020-0010-EA, to the project.

Review of the Environmental Assessment

On April 17, 2020, the BLM published the EA for this project for public review and comment. The public review period was open for 30 days. The BLM received five sets of comments, one of which pertains to Mojave National Preserve.

The Desert Tortoise Council (DTC) requested a list of mitigations for National Park Service lands. Adaptive Management and Mitigation Measures are included below; this FONSI will be forwarded to the Desert Tortoise Council. The DTC also requested that the Bureau of Land Management describe how specific management actions from the "Mojave National Preserve Plan" will be achieved in the ELM project. The California Desert Protection Act of 1994 ensures the operation, maintenance, repair, replacement and upgrading of Southern California Edison's transmission lines in Mojave National

Preserve (Public Law 103-433, Title V, § 511(a) and (b)). The General Management Plan for Mojave National Preserve identifies Plan Actions for Rights of Way and Easements to document all the existing rights-of-way/easements and develop an administration plan. Existing rights-of-way will be converted to NPS standards and regulations, where possible.

Mojave National Preserve submitted comments on the EA to the BLM on June 9, 2020. The issues of greatest concern were the lack of detail – photographs, drawings, visual simulations – for the two proposed repeaters to be installed on NPS lands; and lack of consideration of SCE's LVRAS construction project in the cumulative impact analysis. Other comments provide technical corrections and additional mitigation measures.

MITIGATION

Table of Adaptive Management & Mitigation Measures

Resource Area	Mitigation	Responsible Party
Desert Tortoise	Each construction crew must have an on-site biological monitor to survey and monitor for desert tortoise, and to implement reasonable and prudent measures and terms and conditions of the Biological Opinion for Activities in the Mojave National Preserve, San Bernardino County, California.	SCE
Desert Tortoise	All on-site personnel must complete desert tortoise orientation training prior to initiating work in Mojave National Preserve. The training materials and schedule must be approved by the National Park Service. This can be combined with an orientation to Mojave National Preserve.	SCE
Desert Tortoise	<p>SCE shall implement protection measures for desert tortoise as suggested by the onsite biologist. Protection measures shall include, but not be limited to:</p> <ul style="list-style-type: none"> • Requiring project personnel to complete desert tortoise orientation and/or training; • Cover trenches or enclose within a fence, and provide escape ramps for all walled holes or trenches deeper than six inches that are left overnight or for multiple days; 	SCE

Resource Area	Mitigation	Responsible Party
	<ul style="list-style-type: none"> • For walled holes or trenches over four feet deep that are left overnight or for multiple days, SCE must cover or enclose them with a fence to prevent tortoise injury from falls; and • Operate all vehicles and equipment at posted speed limits on public roads and follow a speed limit of 15 miles per hour on all non-public access roads to minimize vehicle collisions with tortoises; and • If at all possible, avoid burrows, vegetation or geology (i.e., caliche layers, rock outcrops) that provide cover, loafing sites or thermal protection. 	
Mojave National Preserve	All on-site personnel must complete an orientation to Mojave National Preserve. The training materials and schedule must be approved by the National Park Service. This can be combined with an orientation to desert tortoise.	SCE
Nesting Birds	To prevent undue harm to nesting birds, construction activity disturbance and habitat-altering activities or portions of activities should be scheduled outside bird breeding season. In upland desert habitats and ephemeral washes containing upland species, the season generally occurs between March 15th - August 1st. If an activity that may disturb breeding activity or alter any breeding habitat must occur during the breeding season, a qualified biologist must survey the area for nests prior to commencement of such construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation and human infrastructure. If any active nests (containing eggs or young) are found, an appropriately-sized buffer area (up to 300	SCE

Resource Area	Mitigation	Responsible Party
	feet for passerine species or up to 500 feet for owls and raptors) must be avoided until the young birds fledge.	
Raptors	Red-tailed hawks and ravens, both known to nest on transmission towers in Mojave National Preserve, must be protected according to the provisions of the Migratory Bird Treaty Act.	SCE
Wildlife	SCE shall implement additional protection measures for general and special-status wildlife species as suggested by the onsite biologist. Special-status mammal species occurrence in the project area include the desert bighorn sheep, American badger, kit foxes, woodrat species, and other species that could be affected or crushed by construction vehicles. Protection measures would include requiring project personnel to attend training; cover trenches or provide escape ramps for all walled holes or trenches deeper than 6 inches; operate all vehicles and equipment at posted speed limits on public roads and follow a speed limit of 15 miles per hour on all non-public access roads to minimize vehicle collisions with wildlife, if at all possible avoid middens, burrows, vegetation or geology (i.e., caliche layers, rock outcrops) that provide cover, dens or cavities. Trenches or holes greater than 5 feet in depth must be covered or fenced when left overnight to prevent entrapment and/or injury to desert tortoises.	SCE
Special-status plants	Locations of any special-status plants shall be flagged and avoided as possible and monitored by a qualified biologist during construction. Dust control measures will also be implemented to minimize fugitive dust impacts on plants. See LUPA-BIO-7/13, LUPA-BIO-PLANT-2/3, and CONS-BIO-PLANT-1. (BLM Mitigation BR-2)	SCE

Resource Area	Mitigation	Responsible Party
Native vegetation/plant assemblages	Impacts to native vegetation shall be avoided to the maximum extent possible. See LUPA-BIO-7/13/14, LUP-BIO-SV5-1/2/3/5, and LUP-COMP-1/2. (BLM Mitigation BR-3)	SCE
Habitat restoration and revegetation	A Habitat Restoration and Revegetation Plan shall be prepared and implemented. Within the Mojave National Preserve, biological crusts need to be carefully removed intact, stored in a safe place, and then replaced in the original location after revegetation to complete restoration. Also, within the Mojave National Preserve, vegetation restoration must follow the vegetation management guidelines set forth in the NPS Reference Manual #77: Natural Resource Management and, in particular, the preservation of diversity, preservation of genetic integrity and the prevention of genetic contamination. See LUPA-BIO-7/13, LUPA-BIO-SVF-1/2/3/5, LUPA-BIO-VEG-1/5, LUPA-LIVE-1, NLCS-DIST-1/2, NLCS-LANDS-1/3/5, and ACEC-DIST-1/2. (BLM Mitigation BR-4)	SCE
Habitat Compensation	A Habitat Compensation Plan shall be prepared and implemented. See LUPA-BIO-13 and LUPA-COMP-1/2, NLCS-DIST-1/2, NLCS-LANDS-1/3/5, and ACEC-DIST-1/2. (BLM Mitigation BR-5)	SCE
Weed Management	BR-6 An Integrated Weed Management Plan shall be prepared and implemented to minimize the spread of noxious and invasive weeds during construction. The Integrated Weed Management Plan will follow guidelines set forth in the “SCE Right-of-way Weeds in Mojave National Preserve – Status and Guidance 2018” for construction activities in Mojave National Preserve. In particular, active control measures will be implemented during the appropriate control season	SCE

Resource Area	Mitigation	Responsible Party
	prior to the start of construction. See LUPA-BIO-6/10/11 and LUPA-LIVE-1.	

Agency Consultation

SHPO and Tribal Consultation

California State Historic Preservation Officer

Class III background research and field surveys were completed and documented in cultural resources inventory and evaluation reports prepared for the Selected Action. Eight sites are on lands administered by the NPS, of which two lay outside the Area of Potential Effect [APE]. Ten of the documented sites are on lands administered by the NPS, Mojave National Preserve. Twelve new cultural resources sites were identified, three previously identified resources were revisited (two of which were updated), and 24 isolated finds were documented. As the lead agency, the Bureau of Land Management submitted a request for concurrence to the California State Historic Preservation Officer June 20, 2018. The SHPO concurred with the BLM's findings on July 30, 2018.

On June 1, 2017, the BLM initiated tribal consultation regarding both of SCE's projects, LVRAS and Eldorado-Lugo-Mohave Series Capacitor (ELM), on behalf of the NPS with the following tribes: Colorado River Indian Reservation, Fort Mojave Indian Tribe, Chemehuevi Indian Tribe, and Twentynine Palms Band of Mission Indians. The Fort Mojave Indian Tribe and the Twentynine Palms Band of Mission Indians both responded with interest in continuing government-to-government consultation for the duration of the two projects.

U.S. Fish and Wildlife Service

The BLM requested concurrence from the US Fish & Wildlife Service (USFWS) with a finding of not likely to adversely affect desert tortoise or Mohave tui chub, both species of which are listed as either threatened or endangered under the federal Endangered Species Act and the California Endangered Species Act. The request, which was sent September 7, 2018, includes a biological assessment of the EA. The USFWS issued programmatic biological opinions to both the BLM California Desert District and to the NPS Mojave National Preserve. The Biological Opinion for Activities in the Mojave National Preserve, San Bernardino County, California was issued August 7, 2019 by the USFWS Palm Springs Field Office. It addresses most operational activities on utility rights-of-way, including SCE's LVRAS project.

California Department of Fish and Wildlife

Throughout the entirety of the project area on both NPS and BLM lands, there are 33 special status plant species and eight special status wildlife species identified by either the California Department of Fish and Wildlife (CDFW), USFWS, or both agencies.

SCE will comply with CDFW guidelines for western burrowing owl surveys and implement mitigation measures per CDFW guidelines. An on-site biologist will monitor for special status plants, flagging individual plants during construction.

CONCLUSION

Based on the information, analysis, and mitigation measures contained in this FONSI; the EA; and the full consideration of scoping and EA review comments received from affected agencies and the public, the NPS has determined that the Selected Alternative does not constitute a major federal action that will significantly affect the quality of the human environment. Therefore, the preparation of an environmental impact statement is not required and the requirements of NEPA have been satisfied. Once NEPA compliance has been satisfied for the Eldorado-Lugo portion of SCE's 500 kV transmission line, the National Park Service, Region 8 will issue a right-of-way permit for the entirety of the transmission corridor. Mojave National Preserve will issue a special use permit for construction of the LVRAS project so that SCE may implement the Selected Alternative.

RECOMMENDED

MICHAEL GAUTHIER Digitally signed by MICHAEL
GAUTHIER
Date: 2021.01.08 13:27:01 -08'00'

Mike Gauthier, Superintendent
Mojave National Preserve
National Park Service

Date

APPROVED

Linda Walker
ACTING Director, Interior Regions 8, 9, 10 & 12
National Park Service

Date