

# Fact Sheet

## Ivanpah-Control Project

Inyo, Kern, and San Bernardino Counties



Southern California Edison (SCE) is proposing to rebuild and remediate components of the existing 115 kilovolt (kV) transmission lines serving the Control and Haiwee Substations in Inyo County, the Inyokern Substation in Kern County, and the Kramer, Coolwater, and Ivanpah Substations in San Bernardino County. The project is subject to review under the California Environmental Quality Act (CEQA).

As the lead agency under CEQA, the California Public Utilities Commission (CPUC) will prepare an Environmental Impact Report (EIR) to meet state and local permitting requirements. As the lead agency under the National Environmental Policy Act (NEPA), the Bureau of Land Management (BLM) will prepare a separate Environmental Impact Statement.

### Proposed Ivanpah-Control Project

Southern California Edison Company (SCE) has studied its transmission system and has determined that certain older parts of the transmission system do not comply with the CPUC's safety requirements defined in its General Order (GO) 95. As a result, SCE is proposing to implement a Transmission Line Rating Remediation (TLRR) program to correct discrepancies in minimum horizontal and vertical conductor clearances. SCE's goal is to remediate all discrepancies on its bulk electric system by 2025, as required by the North American Electric Reliability Corporation (NERC) Mitigation Plan.

SCE has proposed the Ivanpah-Control (I-C) Project to remediate conductor clearance discrepancies on its 115 kV subtransmission lines, from Bishop in Inyo County, south to Inyokern and through the northeastern corner of Kern County, and through San Bernardino County (Kramer Junction, Barstow, and Ivanpah). As shown in Figure 1, the route connects numerous substations.

SCE would construct no new substations as part of the Project. The Project would not expand electrical service to areas not currently served by SCE.

**Proposed Conductor and Increased Capacity.** SCE proposes to replace the existing conductors and structures on the 115 kV system, installing a new type of conductor. The conductors that SCE proposes to install would have the capacity to carry power well in excess of existing transmission line ratings of the 115 kV system. For example, on some segments the new conductor could carry 50% more power.

The information presented here for all five segments is based on SCE's April 2020 Amended PEA. Descriptions of the five route segments follow.

#### Segment 1: Control Substation (Bishop) to Inyokern Substation

This 126-mile project segment includes 111 miles located in Inyo County, with the southernmost 15 miles in Kern County.

The existing 115 kV line generally parallels U.S. 395. There are two SCE electrical circuits that require replacement in this segment: the Control-Haiwee-Inyokern 115 kV circuit and the Control-Coso-Haiwee-Inyokern 115 kV circuit. In this segment, SCE proposes to take the following actions:

- Remove 1,161 existing transmission structures and replace them with 905 new structures;
- Install new conductors and fiber optic cable on the entire 126-mile line segment; and
- Install marker balls on overhead wire where determined to be appropriate.

**Pre-Project Reconductoring.** In order to reduce wildfire risk before construction of the I-C Project begins in 2022, SCE proposes to replace 42 circuit-miles of conductor in areas of moderate and high fire risk during 2019 and 2020. This conductor replacement is not part of the I-C Project but is an urgent repair action that will reduce fire risk in the northern portion of this segment in compliance with SCE's 2019 Wildfire Mitigation Plan.

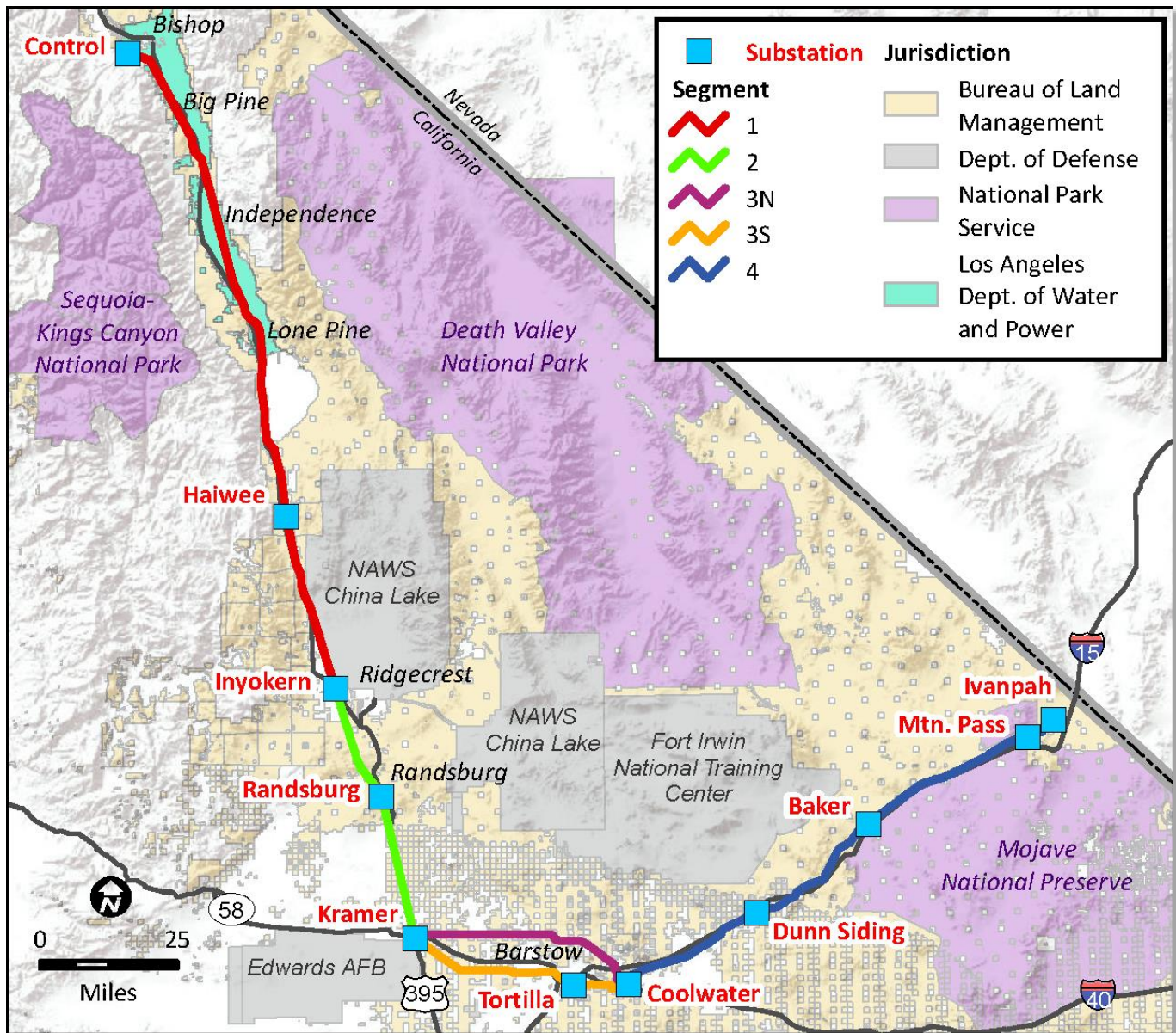


Figure 1. Ivanpah-Control Project Segments and Substations

### Segment 2: Inyokern Substation to Kramer Junction

This 48-mile project segment closely follows U.S. 395 from the existing Inyokern Substation in northeastern Kern County, about 6 miles west of the City of Ridgecrest to the Kramer Substation in western San Bernardino County to the existing Randsburg Substation.

About 58 percent of the land crossed by the route is federal land administered by the BLM, and 41 percent is private land. SCE proposes to take the following actions in Segment 2:

- Remove approximately 390 existing double-circuit transmission structures and install approximately

342 double-circuit steel poles with a single circuit installed;

- Remove approximately 48 linear miles of existing conductor and install new conductor;
- Install approximately 48 linear miles of fiber optic cable; and
- Install marker balls on overhead wire where determined to be appropriate.

### Replacement of Deteriorated Poles in Segments 3N and 3S

These segments of the I-C Project include nearly 400 existing wood poles along the existing 115 kV line that have been identified by SCE as being severely

deteriorated due to age. These poles will be replaced during 2019 and 2020, prior to the construction of the I-C Project. The immediate replacement of severely deteriorated poles is a part of SCE's ongoing maintenance program and is not part of the I-C Project. The I-C Project proposal for Segment 3N and 3S includes replacement of a small number of additional poles and conductor within the segment, except those poles that are being replaced in 2019 and 2020.

### Segment 3N: Kramer Junction–Coolwater Substation (East of Barstow)

This third project segment includes two separate routes between the Kramer Substation (located just south of the intersection of State Route 58 and U.S. 395 and the existing Coolwater Substation (located about 9 miles east of the City of Barstow). Nearly half of these route segments are on federal land administered by the BLM, and about 45 percent is on private land.



This 44-mile project segment runs just north of Barstow, from the existing Kramer Substation in the west to the existing Coolwater Substation in the east.

SCE's current plan for this segment is to:

- Remove 43 existing structures and replace them with 45 lightweight steel, wood H-frame or multipole structures;
- Replace the existing conductor along the entire 44-mile length of the segment; and
- Install fault return conductor along 2.3 miles.

### Segment 3S: Kramer Junction–Tortilla Substation (Barstow)–Coolwater Substation

Segment 3S runs just south of Barstow for 44 miles between the existing Kramer, Tortilla, and Coolwater Substations.

SCE's plan for this segment is:

- Remove 42 existing structures and replace them with 42 new steel or wood structures;
- Replace the existing conductor along the entire 44-mile length of the segment; and
- Install fault return conductor along 3.6 miles.

### Segment 4: Coolwater Substation (East of Barstow) to Ivanpah Substation

Segment 4 begins just east of Barstow and ends near the Nevada border, at the Ivanpah Substation, adjacent to the Ivanpah Solar Electric Generating System. Segment 4 roughly follows Interstate 15 to the northeast.

SCE proposes to:

- Remove approximately 60 existing structures and replace them with 62 new steel or wood structures;
- Modify approximately 83 structures adjacent to the replacement structures.



### Potential Alternatives to the I-C Project

In the Proponent's Environmental Assessment (PEA) for the I-C Project, SCE analyzed a range of alternatives. The following four alternatives were considered by SCE to be infeasible:

- Decommission and Remove all 115 kV facilities defined in Segments 1 through 4: eliminated because areas would be left with no electric service.
- Operating Voltage Increase for Segment 2: eliminated due to high cost.
- Energy Storage: eliminated because the reliability discrepancies would remain.
- Derate Only: eliminated because many reliability discrepancies would remain.

The following alternatives were considered feasible by SCE in its April 2020 Amended PEA:

- **Alternative A:** Rebuilding of Segments 1, 2, 3N, and 3S and derating and remediation of Segment 4. Remediation would include replacement of selected transmission structures, and derating would lower the operating amperage.
- **Alternative B:** Rebuilding of Segments 1, 2, and 4; rebuilding Segment 3N as a double-circuit line; and derating and remediation of Segment 3S.
- **Alternative C:** Rebuilding of Segments 1 and 2; rebuilding Segment 3N as a double-circuit line; and derating and remediation of Segments 3S and 4.
- **Alternative D:** Rebuilding of Segments 1, 2, and 4; rebuilding Segment 3S as a double-circuit line; and derating and remediation of Segment 3N.
- **Alternative E:** Rebuilding of Segments 1 and 2; rebuilding Segment 3S as a double-circuit line; and derating and remediation of Segments 3N and 4.

The CPUC will consider alternatives in the EIR as required by CEQA, including alternatives suggested in public scoping comments.

### I-C Project Construction

SCE proposes to build the project within or adjacent to existing rights-of-way (ROW) and on existing SCE-owned property. SCE will need to acquire new authorizations from the BLM and other federal and state landowners, and new or modified easements from private landowners, to accommodate the reconstructed subtransmission lines in some locations. Key construction activities for all segments are as follows:

- **Material Yards:** SCE proposes to use a number of material yards to support its construction activities, typically between one and five acres.
- **Work Areas:** At each pole site, a work area ranging from 1/4 acre to ~1 acre would be required.
- **Access Roads:** SCE would use existing access roads (running along the entire transmission line) and spur roads (short roads to reach each tower from the access road), as well as public roads.

- **Vegetation Removal:** During road rehabilitation and preparation of staging areas, vegetation will be trimmed or removed, as needed. Tree removal would be minimized.
- **Helicopter Use:** SCE would use helicopters to support construction activity.
- **Construction Personnel:** SCE anticipates approximately 200 construction personnel working on a given day.



### Schedule

The anticipated schedule for the CEQA process, CPUC approval, and I-C Project construction is presented in Table 1.

**Table 1. I-C Project Schedule**

Project Activity	Approx. Date
SCE Filed Initial Application at CPUC	July 17, 2019
SCE Filed Revised Application at CPUC	April 13, 2020
CPUC Public Scoping	Mid-2020
CPUC Publish Draft EIR	Early 2021
CPUC Publish Final EIR	Late 2021
CPUC Project Approval	Early 2022
SCE Construction Start	2023
Project Operational	2026

**For Additional Information on the I-C Project and the CPUC’s CEQA Process:**

<https://www.cpuc.ca.gov/Environment/info/asp/ivanpah-control/ivanpah-control.htm>

Email: [Ivanpah-Control@aspenerg.com](mailto:Ivanpah-Control@aspenerg.com)

Telephone Message Line: (800) 535-2572