

***Southern California Edison***  
***A.19-07-015 – Transmission Line Rating Remediation Ivanpah-Control***

**DATA REQUEST SET E D - D a t a R e q u e s t - 0 1 2**

**To: Energy Division**  
**Prepared by: Gary Busteed**  
**Job Title: Senior Advisor, Major Environmental Projects**  
**Received Date: 2/15/2023**

**Response Date: 3/2/2023**

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**Question 01:**

Confirming my email of February 14, 2023, we are requesting completion of all surveys done for the Proposed Project alignment for the three LADWP alternative routes, including the (1) Fish Springs, (2) Manzanar, and (3) Fossil Falls alternative realignment segments.

**Response to Question 01:**

SCE will conduct the following surveys along the Fish Springs (Crater Mountain), Manzanar, and Fossil Falls alternative realignment segments:

- Vegetation mapping and characterization, including suitable habitat for listed wildlife such as burrowing owl and desert tortoise
- Botanical surveys for rare/BLM Sensitive species
- Jurisdictional delineation of Waters of the U.S., including wetlands and Waters of the State
- Class III Cultural Resource Surveys and Record Search

From 2017 through 2018, SCE performed surveys for burrowing owl, desert tortoise, and Mohave ground squirrel along the IC Project alignment. SCE does not propose to conduct such surveys along the alternative realignment segments for the following reasons:

**Burrowing Owl**

All three LADWP alternative routes are located within the currently known and historical ranges for burrowing owl, therefore, SCE already assumes the presence of burrowing owl in these alternative routes. The proposed design features/applicant proposed measures identified in the Proposed Project would also avoid or minimize impacts to the species within the alternative routes. Therefore, because presence is assumed and the proposed design features/applicant proposed measures for burrowing owl would apply to the Proposed Project and the proposed alternatives, SCE does not believe there is a need to conduct additional burrowing owl surveys along the three LADWP alternative routes.

As described in Applicant Proposed Measure BIO-AVI-2, SCE will conduct pre-construction surveys for burrowing owl in accordance with the most current CDFW guidelines (CDFG, 2012; or updated guidelines as they become available). These surveys will be conducted in suitable habitat prior to the start of construction activities, likely in concert with pre-construction nesting bird

surveys or other pre-construction clearance sweeps. The vegetation mapping that will be performed along each of the three alternative routes will be used to identify those locations with suitable habitat that would be subject to the pre-construction survey requirements.

### **Desert Tortoise**

The Fish Springs (Crater Mountain) and Fossil Falls alternatives are outside the currently known and historical ranges for desert tortoise, and therefore SCE does not propose surveying for this species along those routes. With respect to the Manzanar alternative, that route is located within desert tortoise historic range and therefore SCE already assumes the presence of desert tortoise in this alternative's route. However, the proposed design features/applicant proposed measures identified in the Proposed Project would avoid or minimize impacts to the species. Therefore, because presence is assumed along the Manzanar alternative route and the proposed design features/applicant proposed measures for desert tortoise would apply to the Proposed Project and the proposed alternative, SCE does not believe there is a need to conduct additional desert tortoise surveys along the Manzanar alternative route.

As described in Applicant Proposed Measure BIO-HERP-1, no more than seven days prior to the onset of ground disturbing activities, a biological monitor under the supervision of an agency-approved biologist—with experience monitoring and handling desert tortoise—will conduct a pre-activity survey in all work areas (plus an approximately 300-foot buffer) within potential desert tortoise habitat for the purposes of flagging burrows for avoidance. The vegetation mapping that will be performed along the Manzanar alternative route will be used to identify those locations with suitable habitat that would be subject to the pre-activity survey requirements.

### **Mohave Ground Squirrel**

The Fish Springs (Crater Mountain) and Fossil Falls alternatives are outside the currently known and historical ranges for the Mohave ground squirrel, and therefore SCE does not propose surveying for this species along those routes.

SCE assumes, with CDFW concurrence, the Manzanar alternative is located within the species' historic range and therefore SCE already assumes the presence of Mohave ground squirrel in this alternative's route. However, the proposed design features/applicant proposed measures identified in the Proposed Project would avoid or minimize impacts to the species within this alternative. Therefore, because presence is assumed along the the Manzanar alternative route and the proposed design features/ applicant proposed measures for Mohave ground squirrel would apply to the Proposed Project and the proposed alternative, SCE does not believe there is a need to conduct additional surveys for Mohave ground squirrel along the Manzanar alternative.

### **Avian Species**

The three proposed LADWP alternatives are within the same flyway as the Proposed Project. Therefore, SCE does not propose additional surveys along the LADWP alternative routes. SCE has

proposed a Nesting Bird Management Plan to avoid or minimize impacts to the anticipated avian species that will be encountered throughout the Owen's Valley, which encompasses all three proposed LADWP alternatives.

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**A.19-07-015 – TLRR IC**

**DATA REQUEST SET E D - S C E - 0 1 2**

**To: Energy Division4040**

**Prepared by: Kashif Siddiqi**

**Job Title: Engineering Senior Project Manager**

**Received Date: 2/15/2023**

**Response Date: 3/2/2023**

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**Question 02:**

Background. As described in PEA Section 3.5.1.1, in Segment 1 of the I-C Project, SCE proposes to remove all existing towers and poles and replace them with approximately 383 double-circuit tubular steel poles (TSPs), approximately 125 multipole TSP structures, and approximately 391 double-circuit lightweight steel (LWS) poles. PEA Section 3.5.1.2 states that Segment 2 of the I-C Project would require removal of all existing tower and poles; they would be replaced with approximately 342 double-circuited TSPs. Along both segments, most existing structures are lattice steel structures. The following information is requested because the proposed TSPs and LWS poles would be more highly visible than lattice steel structures that exist in Segment 2 and parts of Segment 1.

- Please explain why TSPs and LWS poles are being proposed for Segments 1 and 2, rather than replacing the existing structures with lattice steel structures.
- Is there a difference in cost between lattice steel structures and TSPs or LWS poles? If so, what is the cost difference?
- Is there a difference in construction timeline, construction process, or ground disturbance between lattice steel structures and TSPs/LWS poles? If so, please describe.
- Would the replacement of some or all of the Segment 1 and 2 structures with lattice steel structures present any other concerns regarding feasibility or other issue? If so, please describe.

**Response to Question 02:**

- SCE's proposed design includes replacing existing 115 kV lattice steel structures with fewer TSPs and LWS poles in Segments 1 and 2. SCE's existing standard for 115 kV lines requires installation of TSPs and LWS poles. SCE uses TSPs and LWS poles rather than lattice steel structures for new subtransmission lines because TSPs and LWS poles are easier to construct, result in less ground disturbance, require less maintenance, and create fewer bird nesting opportunities. As a result, SCE currently does not have an approved standard for 115 kV lattice steel structures. For SCE to develop a new 115 kV lattice steel structure standard an extensive design, prototyping, testing, and approval process would have to be completed before such a family is cleared for safe use in SCE's service territory. As SCE does not currently have an approved design for 115 kV lattice steel structures, the Proposed Project uses existing approved structure types, enabling SCE to efficiently design, order materials for, and construct the Proposed Project.
- SCE believes that the portion of this question that relates to structure costs is not relevant to the California Public Utilities Commission's ("CPUC's") consideration of a PTC for the I-C Project or CPUC's the environmental review of the I-C Project. Pursuant to CPUC General Order 131-D, Section IX.B.1.f., "an application for a permit to construct need not include

either a detailed analysis of purpose or necessity, a detailed estimate of the cost and analysis...beyond that required for CEQA compliance.”

Nevertheless, in furtherance of providing as complete a response as possible, SCE provides the following response:

There is a cost difference between lattice steel structures and TSPs or LWS poles. TSPs and LWS poles are less expensive to install than lattice steel structures because TSPs require only one foundation and LWS poles are direct-buried into the ground, whereas lattice steel structures require installation of four separate foundations. The additional cost of the lattice steel structures is a result of the amount of additional material required to build the lattice steel structures and the additional material required to build the larger foundations. See the table below for estimated costs by structure type, including the cost of labor and materials.

Estimated Installed Cost by Structure Type <sup>1</sup>	
Structure Type	Estimated Installed Cost
Lightweight steel pole	\$90,000
Tubular steel pole	\$160,000
Lattice steel structure <sup>2</sup>	\$220,000

1. Estimated structure cost includes installation

2. Costs approximated from 220 kV tower construction projects

- There is a difference in construction timeline, construction process, and ground disturbance between lattice steel structures and TSPs/LWS poles. Lattice steel structures would increase project schedule, require a longer construction process, and result in more ground disturbance than TSPs or LWS poles. Lattice steel structures would increase the project schedule because SCE does not have an approved 115 kV lattice steel structure design. As described above, SCE estimates it would take approximately two years to design, prototype, test, and obtain internal approval for a new 115 kV lattice steel structure family. Design of a new 115 kV lattice steel structure class typically does not begin until SCE receives final CPUC and BLM project approval. Once a final design is approved, material procurement for lattice steel structures is longer than for TSPs or LWS poles. The construction process for lattice steel structures is more complex as those structures require more footings and a longer assembly time. Additionally, lattice steel structures typically cause greater ground disturbance due to the larger number of footings and increased footprint size for these structures, which require a larger construction work area, resulting in more disturbance than TSPs or LWS poles.
- The replacement of some or all of the Segment 1 and 2 structures with lattice steel structures presents additional feasibility concerns beyond those described above. Installation of lattice steel structures may require additional right of way in Segments 1 and 2 to provide adequate horizontal clearance between the existing structures and new structures to ensure that the project is safely constructed. There are two existing energized lines in Segments 1 and 2, and during construction one line must remain energized. However, if lattice steel structures were to be installed, there may not be enough clearance between the existing structures and

the new structures because the current project design identified TSPs and LWS poles, which have a smaller footprint and take less horizontal space than the lattice structures.

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**DATA REQUEST SET E D - D a t a R e q u e s t - 0 1 2**

**To: Energy Division**  
**Prepared by: Scott Lacy**  
**Job Title: Major Construction Senior Project Manager**  
**Received Date: 2/15/2023**

**Response Date: 3/2/2023**

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**Question 03:**

Background: The Ivanpah-Control Project has been addressed in SCE's Open Access Information Stakeholder Review Process (SRP) in a project status spreadsheet dated December 1, 2022. In order to ensure that we understand the project as currently proposed, please respond to the following requests.

- SCE SRP ID PB-23.01 indicates that the “Control-Haiwee-InyoKern No.1 TLRR Remediation” project is “Canceled.” Please describe whether this information represents a material change in the project status or design for Segment 1 of the I-C Project presently undergoing environmental review.
- SRP ID SP-25 indicates that the “Ivanpah-Control TLRR Remediation” has a “Current Projected Total or Actual Final Cost” of approximately \$692 million. Please describe whether this reflects a material change in the project status or design for the I-C Project, as shown in the Amended Application of April 2020 as having a cost of approximately \$715 million in 2020 constant dollars.

**Response to Question 03:**

- The SRP December 1, 2022 submission does not represent a material change in the project status or design which is currently undergoing environmental review. The December 1, 2022 update was to show that the original scope presented under SCE SRP ID PB-23.01 is no longer being pursued as its own individual separate project but is considered a part of the larger SCE SRP ID SP-25, Ivanpah-Control (IC) TLRR Remediation project (IC Project). SCE responded to a similar SRP Question (#5.011) on February 7, 2023 (see attachment). That response includes additional information regarding this internal change by SCE.
- The change in cost for SRP ID SP-25 is not due to a material change in the project status or design for the IC Project. After filing the Amended Application, SCE conducted a periodic review of its forecasted project costs and determined that the IC Project was in need of an adjustment based on changes unrelated to material changes or the design of the project. This cost adjustment was reflected in the SRP table. The SRP table only accounts for FERC-designated funds, while the total dollar project value submitted at the time the Amended Application includes CPUC and FERC-jurisdictional costs associated with the project.

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**SRP Data Requests - ER19-1553-003 – Stakeholder Review Process DRs re TO2019A**

**DATA REQUEST SET Grid SME - SCE - SRP - Cycle 5 - Dec 2022**

**To: GridSME**

**Prepared by: Nora Harris**

**Job Title: Senior Project Manager**

**Received Date: 1/17/2023**

**Response Date: 2/7/2023**

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**Question 5.011:**

PB-23.01, Control-Haiwee-InyoKern No.1 TLRR Remediation

In SCE's December 2022 SRP Project Spreadsheet, the status is "Canceled".

- a. Please discuss why this project was cancelled.
- b. If the project has become part of a different or new project, please identify the SRP ID for this project and provide the PMWIF form for this project.

**Response to Question 5.011:**

- a. Under the original program prioritization plan, the Control-Haiwee-Inyokern circuit project comprised more than one thousand A2 and A3 G.O. 95 discrepancies, which put the circuit very near the top of the list for completion. At the time of the project's inception, the program team was focused on span-based remediation, and the proposed remediation was to install interset structures at discrepancy span locations. While the project was pursuing environmental clearance, the TLRR Program shifted strategy to circuit-based remediation and determined that the original planned remediation (interset structures) was not the most efficient course of action. In addition, due to the environmentally sensitive areas the Control-Haiwee-Inyokern circuit traverses and the extent of the circuit remediation, SCE determined that the most prudent course of action was to run this project through the CPUC's licensing process as part of SP-25, Ivanpah-Control TLRR Remediation.
- b. The original project scope for PB-23.01 is no longer being pursued by SCE. The TLRR work to clear all circuit discrepancies is now part of the larger SP-25, Ivanpah-Control TLRR Remediation project. The PMWIF for SP-25 is provided in the attached file named "MPO\_PMWIF\_PIN 7904\_20160629.pdf". A clear reference to the transitioned work can be found in the Project Summary for SP-25, attached here and titled "20191022 TLRR IC Project Summary Version#10." SCE transferred much of the project material to support other project efforts. All remaining material and any direct costs that could not be transferred to other project efforts were written off to expense.