Southern California Edison
A.19-07-015 – TLRR IC

DATA REQUEST SET E D - S C E - J D R I - C P r o j e c t - 0 0 1

To: Energy Division
Prepared by: Paul McCabe
Job Title: Senior Advisor
Received Date: 11/19/2024

Response Date: 12/13/2024

Question JDR-1:
JDR-1: Sharing I-C Structures

Please comment on a potential alternative in which along US 395, the Cal City 115 kV conductors would be installed in the vacant position on the I-C double circuit structures (rather than on newly constructed Cal City structures).

If the shared structure concept is deemed feasible, please also comment on the feasibility of additionally transferring approximately 2 miles of the Isner 33 kV distribution circuit, possibly as a distribution under-build arrangement, onto the I-C structures as is similarly proposed for the Cal City Project. Ignoring the potential timing concerns, can SCE develop a physical alternative or approach that will serve the needs of both projects?

Response to Question JDR-1:
SCE believes that it may be feasible to install a segment of SCE's proposed new Kramer-Cal City 115 kV line (part of the proposed Cal City Substation 115kV Upgrade Project) on shared structures that would be installed as part of SCE's proposed Ivanpah-Control Project.

The proposed new Ivanpah-Control Project double-circuit 115 kV line structures could be designed to accommodate the under-build of approximately two miles of SCE's existing Isner 33 kV circuit. However, designing the Ivanpah-Control Project double-circuit 115 kV line structures to accommodate the underbuild of the Isner 33 kV distribution circuit could result in structure heights that may exceed the pole height range identified in SCE's Ivanpah-Control Project and Cal City Substation 115 kV Upgrade Project Proponent's Environmental Assessment. Additionally, SCE does have concerns about the impact of the proposed approach on the timing for reviews, project approvals, coordination, and construction activities, particularly given that it would likely require the completion of Segment 2 of the Ivanpah-Control Project prior to the beginning of construction of the contemplated 18.5-mile portion of the Cal City Substation 115 kV Upgrade Project, which would include the Isner 33 kV distribution circuit underbuild.

Southern California Edison
A.19-07-015 – TLRR IC

DATA REQUEST SET E D - S C E - J D R I - C P r o j e c t - 0 0 1

To: Energy Division
Prepared by: David De Leon
Job Title: Major Construction Project Manager
Received Date: 11/19/2024

Response Date: 12/13/2024

Question JDR-2a:
JDR-2: Timing Related to Sharing of I-C Structures

SCE is aware of the BLM NEPA schedules for both projects. Neither the I-C Project nor the Cal City Project can be constructed until receipt of BLM approval.

(a) If the NEPA process is completed and BLM ROW grants are issued for both projects during 2025, as BLM currently expects, would there be any timing concerns associated with sharing of the I-C structures?

Response to Question JDR-2a:
2a) SCE is aware of the BLM NEPA schedules for both projects and understands that each project requires BLM approval prior to proceeding. If the BLM completes the NEPA process and issues ROW grants for both projects in 2025, there would be potential additional timing concerns associated with sharing the I-C structures. For example, additional resource agency permits may be necessary for each project, including waters and take permits from CDFW. If there are delays to permitting approval for the I-C Project, the Cal City Substation 115kV Upgrade Project would unnecessarily be delayed.

Although there are concerns about the timing for reviews, project approvals, coordination, and construction activities, SCE believes if a) both agencies are aligned and pursuing the common objective reflecting this work in the area, and b) SCE receives approvals from both regulators (e.g., CPUC and BLM) for both projects in a fairly synchronized timeframe, then both projects can coordinate and modify the engineering design, address procurement needs, and adjust construction scheduling efforts to meet an objective of sharing structures.

Southern California Edison
A.19-07-015 – TLRR IC

DATA REQUEST SET E D - S C E - J D R I - C P r o j e c t - 0 0 1

To: Energy Division
Prepared by: Scott Lacy
Job Title: Major Construction Senior Project Manager
Received Date: 11/19/2024

Response Date: 12/13/2024

Question JDR-2b:
JDR-2: Timing Related to Sharing of I-C Structures

SCE is aware of the BLM NEPA schedules for both projects. Neither the I-C Project nor the Cal City Project can be constructed until receipt of BLM approval.
b. If required to serve Cal City load, could SCE prioritize construction of I-C Segment 2 over Segment 1?

Response to Question JDR-2b:

At this time the overall construction sequencing of the Ivanpah-Control project has not been developed. However, because of the stand-alone utility of each Ivanpah-Control project segment, it is feasible that the scheduling for construction of Ivanpah-Control Segment 2, or at least that approximately 18-mile long portion where that segment overlaps with the Cal City project scope, could be aligned with the timing needed to serve Cal City load.

Southern California Edison
A.23-03-005 – Cal City PTC

DATA REQUEST SET ED-SCE-JDR Cal City Project-001

To: Energy Division
Prepared by: Paul McCabe
Job Title: Senior Advisor
Received Date: 11/19/2024

Response Date: 12/13/2024

Question JDR-3:
JDR-3: Loop-in Cal City Project 115 kV Line

a. Please comment on the potential alternative in which the Cal City 115 kV line would not be constructed along US 395, but instead would be a single or double-circuit 115 kV line from Cal City Substation that would loop into the I-C 115 kV Inyokern-Kramer-Randsburg circuit. Would this configuration adequately serve the Cal City Project's needs? Please explain whether a single- or double-circuit line would be required in this situation.

b. Please comment on the potential use of a tap, ring-bus, or breaker and a half loop-in configuration to be constructed in the area just west of the intersection of US 395 and 20 Mule Team Parkway.

c. If a breaker and a half scheme or similar loop-in configuration would not be acceptable, what other options are available to allow the Cal City Project to benefit from the I-C 115 kV line to Kramer Substation, without construction a redundant 18.5 miles of new line?

Response to Question JDR-3:

Part a.
SCE does not support the proposed potential alternative, because it would bring all of SCE's Kramer 115 kV System under California Independent System Operator ("CAISO") control and has the potential to require significant additional system upgrades, either of which could have wide-ranging impacts in terms of cost, project timing, and environmental impacts.
SCE is unable to confirm or refute whether the proposed Cal City Substation 115 kV Upgrade Project would be adequately served by looping the Cal City Substation 115 kV source lines into the Ivanpah-Control Project's Inyokern-Kramer-Randsburg No. 1 115 kV circuit as neither SCE nor CAISO have performed any planning studies addressing this proposal. However, either a tapped or looped, single or double-circuit option would require installation of a switching station, as described in greater detail in SCE's response to Part b. of this question, below.

The portion of SCE's Kramer 115 kV System that would serve Cal City Substation is a radial distribution network served from the California Independent System Operator ("CAISO")-controlled Bulk Electric System ("BES") and is not under CAISO control and, therefore, not subject

to be compliant with North American Electric Reliability Corporation (NERC) reliability standards, Western Electricity Coordinating Council (WECC) regional criteria, and the CAISO planning standards. If the Kramer radial portion, including the Cal City 115 kV Substation, becomes part of the network BES, then it has to comply with the aforementioned standards which could result in additional system upgrades which would significantly increase the scope, cost and environmental impacts.

Configuring one of the Cal City Substation's 115 kV source lines to tap or loop into the CAISO-controlled Kramer-Inyokern-Randsburg No. 1 115 kV Line would require CAISO approval and would then subject all of SCE's Kramer 115 kV System to CAISO control. This would require submitting the proposal through the CAISO Transmission Planning Process (TPP), obtaining CAISO approval, and if approved, subjecting all of SCE's existing non-CAISO-controlled Kramer 115 kV System facilities to CAISO planning criteria.

Connecting to the CAISO-controlled Kramer-Inyokern-Randsburg No. 1 115 kV Line may require significant additional system upgrades, as determined through the CAISO TPP. These potential upgrades would require considerable time to plan, obtain necessary approvals, and construct. It is reasonable to expect that this work could cause substantial additional environmental impacts, additional delays, and significant cost increases compared to SCE's proposed design for the Cal City Substation 115 kV Upgrade Project.

Part b.
Connecting to the Cal City Substation 115 kV Upgrade Project's 115 kV source lines into the CAISO-controlled Kramer-Inyokern-Randsburg No.1 115 kV Line (Segment 2 of SCE's Ivanpah-Control Project) would require installation of a new 115/115 kV switching substation. This switching station, at a minimum, would necessitate pole-line structures to route the lines in and out, switchrack structures to terminate the lines, circuit breakers, and a control building. Constructing a new switching station would not only significantly increase costs but potentially increase environmental impacts to the overall scope of the two separate projects.

Part c.
SCE has not identified an option that would allow the Cal City Substation 115 kV Upgrade Project to benefit from the Ivanpah-Control Project's Kramer-Inyokern-Randsburg No.1 115 kV Line rebuild that would eliminate the need to install 18.5 miles of new 115 kV line (i.e., connecting Cal City Substation directly to the Kramer-Inyokern-Randsburg No.1 115 kV Line). Any such approach would require the installation of additional upgrades (e.g., switching station) not previously contemplated in either the Cal City Substation 115 kV Upgrade Project or the Ivanpah-Control Project. SCE does not believe that any feasible alternative exists that would meet the needs of the Cal City Substation 115 kV Upgrade Project without the construction of a new 115 kV line that directly connects Kramer Substation and the proposed Cal City Substation. As stated in SCE's response to Question JDR-1 in this Data Set, installing a second 115 kV circuit on the proposed double-circuit structures that are planned to be installed in Segment 2 of the Ivanpah-Control Project would eliminate approximately 18.5 miles of new 115 kV pole line construction and the associated costs and environmental impacts. This alternative would result in the same electrical 115 kV source line configuration (i.e., would include a two-terminal Kramer to Cal City 115 kV line) as SCE's currently proposed Cal City Substation 115 kV Upgrade Project. While SCE would be agreeable to further consider this potential option, there are concerns that need to be overcome. Of

particular concern is that the timing of the Cal City Substation 115 kV Upgrade Project would become dependent on the Ivanpah-Control Project and would require that the construction activities between the two projects be coordinated.

Southern California Edison
A.19-07-015 – TLRR IC

DATA REQUEST SET E D - S C E - J D R I - C P r o j e c t - 0 0 1

To: Energy Division
Prepared by: Scott Lacy
Job Title: Sr. Construction Project Manager
Received Date: 11/19/2024

Response Date: 2/7/2025

Question JDR-01. Follow up:
JDR-1: Sharing I-C Structures

Please comment on a potential alternative in which along US 395, the Cal City 115 kV conductors would be installed in the vacant position on the I-C double circuit structures (rather than on newly constructed Cal City structures).

If the shared structure concept is deemed feasible, please also comment on the feasibility of additionally transferring approximately 2 miles of the Isner 33 kV distribution circuit, possibly as a distribution under-build arrangement, onto the I-C structures as is similarly proposed for the Cal City Project. Ignoring the potential timing concerns, can SCE develop a physical alternative or approach that will serve the needs of both projects?

Response to Question JDR-01. Follow up:

SCE is supplementing JDR-01 to provide information regarding newly identified facilities SCE became aware of after SCE submitted its prior response to this question on December 13, 2024. This response provides SCE's further analysis of the proposed potential alternative based on the consideration of these newly identified facilities, supplementing SCE's prior responses (including the responses to Question JDR-2 and JDR-3).

SCE has identified other installed electrical and telecommunication facilities located on the wood poles supporting the Isner 33 kV distribution line adjacent to Highway 395 heading north from Kramer Substation for about three miles. These facilities may need to be considered when performing the final designs for both the Cal City and Ivanpah-Control (I-C) projects after the CPUC issues its final decisions for each project.

A third-party telecommunications circuit, operated by Frontier Communications (Frontier), is currently underbuilt on the wood poles supporting the Isner 33 kV line for approximately three

miles north of Kramer Substation, until they both turn west along Farmington Road. To provide sufficient space for the existing Frontier telecommunication circuit to be collocated on the new shared 115 kV structures, the poles would need to be 10-15 feet taller than SCE indicated in its December 13, 2024, responses. When taken together, the potential relocation of both the distribution and telecommunication circuits could result in the proposed structures having their approximate heights above ground increased by approximately 20-30 feet as compared to the heights described in either Table 3-3 of the Cal City Proponent's Environmental Assessment (PEA) and Table 3.5-1 of the I-C PEA.

Collocating Frontier's telecommunication circuit to the new I-C Structures would require the CPUC to both (1) direct SCE to make necessary provisions for collocation and (2) issue a separate order directly to Frontier requiring them to move their circuitry to SCE's new structures. If that occurs, SCE would relocate the Isner 33 kV circuit to the new poles, cut the existing wood poles to a level just above the telecommunications circuit, and transfer ownership of the poles to Frontier pursuant to Joint Pole Agreement requirements. The time it would take for Frontier to transfer their circuitry to the new 115 kV structures and remove the lower portions of the existing wood poles is unknown. The construction delay and impacts associated with any work that would be performed by Frontier has not been quantified in either the Cal City or I-C PEA.

In addition to the telecommunication circuit, there is also an existing 115 kV circuit serving a solar generation plant north of Kramer Substation that parallels the proposed routing of the new Cal City 115 kV line. For approximately 0.4 miles north of the Highway 58 offramp area, the Isner 33 kV line is currently underbuilt on those existing structures, so relocating that distribution circuit to either the future Cal City and/or I-C structures may not result in the optimal design in this specific area because the poles currently supporting the gen-tie line would remain regardless of whether the Cal City and IC circuits are collocated.

In conclusion, similar to the December 13, 2024, response, SCE agrees that it may be feasible to collocate the Cal City and I-C 115 kV circuits on shared structures for approximately 15 miles north of the existing solar generation facility, including an approximately 1.5-mile-long section where the Isner 33 kV circuit would be underbuilt on those shared structures. If collocation were to occur, SCE recommends that the CPUC and BLM consider an alternative that includes the proposed Cal City Project alignment for the first approximately three miles north of Kramer Substation (e.g., at the location where the Kramer-BLM West 220kV towers join the alignment coming in from the east) and then transitioning to the proposed I-C Project alignment for the remaining approximately 15 miles north of that location. This approach would increase construction efficiency and reduce necessary 115 kV circuit outages to the existing Kramer-Inyokern #1 115 kV circuit when constructing in that length.

Southern California Edison
A.19-07-015 – TLRR IC

DATA REQUEST SET E D - S C E - J D R I - C P r o j e c t - 0 0 1

To: Energy Division
Prepared by: Scott Lacy
Job Title: Sr. Construction Project Manager
Received Date: 10/7/2025

Response Date: 10/14/2025

Question Q.01 - Follow up - 02:
The Proposed Project now defines that the proposed I-C structures would be installed east of the existing access road (i.e., between the access road and US 395 where the current structures are, as shown in the screenshot below). If this Southern Alignment Adjustment were implemented, would the new I-C structures still be installed east of the existing I-C access road, or would the new structures move to the east side of the access road?

Response to Question Q.01 - Follow up - 02:
SCE respectfully notes a minor typographical error in the question. SCE's response is based on the assumption that the question intended to ask whether the new structures would move to the west side of the access road, rather than the east side. To accurately reflect the direction under discussion, the final line should read, "would the new structures move to the west side of the access road?"

Should both the CPUC and BLM direct SCE to construct portions of the Cal City and Ivanpah-Control 115kV subtransmission lines on common structures where feasible for the approximately 15 miles north of Kramer Substation along Highway 395, SCE would request approval of the Southern Alignment Alternative which would modify the locations of the approximately 26 structures from structure number 121371 south to structure 121346. These structures would then be located approximately 50 feet west from their current design locations, allowing for a greater distance from the existing lattice steel structures during construction, enhancing worker safety in this area.

Generally, these modifications would result in the new structures being situated closer to, but still on the east side of, the existing access road. However, due to the irregular alignment of the existing access road, there may be instances in which new structure locations are positioned on the west side of the access road. An exact count of how many structures would be placed on each side of the road would not be determined until final engineering design for the project(s) is completed.

Southern California Edison
A.19-07-015 – TLRR IC

DATA REQUEST SET E D - S C E - J D R I - C P r o j e c t - 0 0 1

To: Energy Division
Prepared by: Scott Lacy
Job Title: Sr. Construction Project Manager
Received Date: 10/7/2025

Response Date: 10/14/2025

Question Q.02 - Follow up - 02:
Please confirm whether the existing access road would be used for the Southern Alignment Adjustment, and whether Structure Work Areas (black rectangle in screenshot below) would still encompass the location of the relocated new structures.

Response to Question Q.02 - Follow up - 02:
SCE expects that the existing access road would be used for the Southern Alignment Adjustment. However, SCE cannot determine whether any road modifications may be needed until final engineering design for the project is completed.

The Structure Work Areas identified in SCE's Application are generously sized, therefore, SCE expects that the new structures would remain within the identified Structure Work Areas if relocated approximately 50 feet west of their original locations. Nevertheless, until the final engineering design for the project is completed, there is a possibility that minor adjustments to the structure locations may be necessary.