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

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

To: Energy Division
Prepared by: Kevin Garrity
Job Title: Project Engineer
Received Date: 2/11/2021

Response Date: 2/25/2021

Question 01:
Describe the actions SCE might generally undertake that are exempt from the need for CPUC Authorization under CPUC General Order 131-D, Section III.B.1 and that would ensure a long-term likelihood of SCE's bulk electric system facilities operating in compliance with applicable CPUC General Order 95 standards.

Response to Question 01:
Except where infeasible, typical clearance remediation techniques that could be implemented include intersetting structures to reduce sag, pulling conductor tighter or increasing conductor tension to remove sag, installing shorter suspension insulators, derating conductor ampacity, replacing or raising existing structures, replacement of existing conductors, grading, lowering crossing wires, rebuilding lines, and lowering underbuilds. Many of these activities are consistent with General Order (GO) 131-D Section III.B.1 exemptions, however, as discussed in SCE's response to Question 2a of this Data Request, conditions identified in CEQA Guidelines Section 15300.2 may be present and thus may negate these exemptions. (*See* GO 131-D § III.B.2.)

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

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

To: Energy Division
Prepared by: Lori Charpentier
Job Title: Senior Advisor, Regulatory Affairs
Received Date: 2/11/2021

Response Date: 2/25/2021

Question 02a:
What types of actions that are exempt from the CPUC's requirement to file an application requesting authority to construct could be undertaken to physically modify existing I-C facilities, such as routine maintenance, repair, replacements, or minor relocations?

Response to Question 02a:
SCE regularly performs routine maintenance on the subtransmission lines associated with the IC Project facilities to maintain reliability, but typically these activities do not remediate clearance discrepancies. As discussed in SCE's response to Data Request CPUC-SCE-005 Question 5-3a (submitted October 22, 2019), existing programs such as the Deteriorated Pole Program may resolve individual discrepancies through pole replacements of equivalent structures, but replacement activities will not necessarily resolve all existing discrepancies. Poles that are not within the Deteriorated Pole Program will continue to need additional measures to remediate discrepancies. Note also that the existing IC facilities include various structure types such as lattice steel towers that are typically not addressed under the Deteriorated Pole Program.

As discussed in the response to Question 1 of this Data Request, there several actions that SCE may take to remediate existing discrepancies. Typical remediation activities that may be exempt from GO 131-D Section III.B. that were considered for the IC Project include, but are not limited to:

- Intersetting structures to reduce sag
- Pulling existing conductor tighter or increasing conductor tension to reduce sag
- Installing shorter suspension insulators
- Derating conductor ampacity
- Replacing or raising existing structures
- Replacement of existing conductors
- Grading
- Lowering crossing wires
- Rebuilding lines
- Lowering underbuilds

As discussed further in SCE's response to Question 2b of this Data Request, *Segments 3 and 4* of the version of the IC Project proposed by SCE include replacement of existing structures,

replacement of existing conductors, and derating conductor ampacity, all of which could potentially be consistent with an exemption to GO 131-D Section III.B.1. However, SCE has determined that none of the modification techniques identified above could feasibly fully remediate all of the discrepancies located in *Segments 1 and 2* while remaining consistent with the exemptions contained in GO 131-D Section III.B.1.

Note also that although the actions identified above for Segments 3 and 4 may be consistent with one or more of the exemptions listed in GO 131-D Section III B.1., the exemption still may not apply if any of the conditions specified in CEQA Guidelines Section 15300.2 are present. (*See* GO 131-D § III.B.2.) If any such conditions are present, SCE would have to obtain a Permit to Construct authorization from the CPUC to complete the remediations.

In the event the IC Project is not approved and no remediation work consistent with a GO 131-D Section III B.1 exemption were feasible, SCE would not be able to remediate clearances consistent with NERC Reliability Standard FAC-008-3 and associated guidance. SCE has regularly reported updates to WECC and the CPUC Safety Enforcement Division regarding the status of remediations associated with the Transmission Line Rating Remediation (TLRR) Program, and the ability to actually complete that remediation work on the IC Project facilities could be jeopardized in the absence of a Permit to Construct.

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

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

To: Energy Division
Prepared by: Kevin Garrity
Job Title: Project Engineer
Received Date: 2/11/2021

Response Date: 2/25/2021

Question 02b:
Where would these physical modifications most likely occur within each segment of I-C facilities?

Response to Question 02b:
If the proposed version of the IC Project were not approved by the CPUC, SCE would need to remediate discrepancies utilizing actions consistent with the exemptions from Permit to Construct requirements identified in GO 131-D Section III B.1. However, as discussed further below, SCE believes the only areas in which the physical modifications discussed in the response to Data Request Question 1 and 2a could be implemented under such exemptions would be in certain locations within Segments 3 and 4. SCE would not be able to complete remediation activities consistent with GO 131-D exemptions for Segments 1 and 2.

Segments 3 and 4

As discussed in the PEA, Segment 3 remediation actions include reconductoring and replacement of individual structures. Segment 4 actions include derating and replacement of individual structures. These actions theoretically could be undertaken in a manner consistent with GO 131-D Section III.B.1. exemptions; however, as discussed in the response to Question 2a of this Data Request, CEQA Section 15300.2 exceptions may exist that could negate such exemptions. (See GO 131-D § III.B.2.)

Segments 1 and 2

Due to the age and condition of the existing infrastructure (described in further detail below), SCE believes it is appropriate to <u>rebuild</u> Segments 1 and 2 rather than implement modifications such as individual structure replacements or reconductoring. To remain consistent with GO 131-D Section III B.1 exemptions (particularly Exemption "g"), the rebuilt line would need to be constructed entirely within existing SCE Right of Way (ROW) boundaries. However, rebuilding Segments 1 and 2 adjacent to the existing energized circuit and within the existing ROW would require construction crews to maintain the GO 95 required approach distance, which governs both equipment and personnel. Maintaining the approach distance between equipment and personnel from an energized adjacent circuit – even if feasible – would require implementation of extensive and rigorous safety construction protocols, which in turn would add substantial cost to the project and extend construction durations.

Even with such protocols, limiting construction to the existing ROW in the proximity of energized lines results is a safety risk for construction crews. Removing existing conductor and installing new conductor is weather-dependent and cannot be performed during high wind conditions, which frequently occur along Segments 1 and 2. During high wind condition events, it may be impossible to remove or install conductors immediately adjacent to energized lines. Setting new structures using helicopters may also be impossible during high wind conditions. Although SCE would work to reduce risk, the team has identified rebuilding *outside* the existing ROW as a significantly safer approach.

Separate from ROW issues, SCE also does not believe that most of the remediation techniques identified in SCE's response to Question 1 of this Data Request set would be feasible in Segments 1 and 2 under other exemptions. For example, if reconductoring or individual structure replacements were employed (pursuant to Exemption "b" or Exemption "e"), the structure or the conductor, or both, could fail due to their existing condition. The existing lattice steel structures are over 100 years old and were constructed with grillage footings which could pose possible structural integrity concerns since those aged foundations may not be capable of supporting the additional weight from tensioning new conductor. There is also a safety risk to crews if this type of construction technique is utilized (particularly during tensioning), as the additional loading from the weight of the construction worker and/or equipment, when attached to a structure during work activities and while tensioning the line, could exceed the structure's capacity to carry any additional weight, causing part or all of the structure to collapse, jeopardizing the worker. Due to the condition of the conductor, installation of taller structures is also not considered feasible. The existing ACSR conductor is equipped with over 1,200 conductor splice shunts[1], which suggests a risk that increased tension on the lines (including by the installation of taller structures that reduce sag) could cause existing splices to fail.

[1] A splice shunt is an approximately 6-fooot long pre-formed mechanical/ electrical connector that is mounted over an existing line splice. The shunt serves to keep the conductor from parting in the event the line splice fails.

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

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

To: Energy Division
Prepared by: Warnetta Logan
Job Title: Senior Project Manager
Received Date: 2/11/2021

Response Date: 2/25/2021

Question 02c:
What is the timetable in which the I-C facilities could be modified in the absence of CPUC approving the Proposed Project?

Response to Question 02c:
As stated in PEA Section 3.7.6 Construction Schedule and SCE's response to Data Request No. 8, Question 4a, SCE anticipates that construction of the Ivanpah-Control Project would take approximately 39 months. SCE does not expect the durations identified in the Project schedule to change, therefore the construction start date would continue to be approximately nine months from final BLM and CPUC approval, dependent upon obtaining all other required permits. The start of Project construction is dependent upon the timing of SCE's receipt of applicable agency approvals, including approvals from the Bureau of Land Management (BLM), California Department of Fish and Wildlife (CDFW), the Lahontan Regional Water Quality Control Board (LRWQCB), and the Army Corps of Engineers (ACOE). These approvals will require CEQA and NEPA review, as applicable.

In the absence of the CPUC approving the Proposed Project, SCE currently believes that on Segments 3 and 4, discrepancies likely could be remediated consistent with the exemptions identified in GO 131-D Section III.B.1. However, either CDFW or LRWQCB would act as CEQA lead agency for the scope of work for an Incidental Take Permit (pursuant to Fish and Game Code Section 2081), Water Quality Certification (pursuant to Clean Water Act Section 401) or Streambed Alteration Agreement (pursuant to Fish and Game Code Section 1602). As discussed in SCE's response to Question 2b of this Data Request set, SCE would not be able to complete remediation activities consistent with the exemptions identified in GO 131-D Section III.B.1 for Segments 1 and 2 and therefore SCE believes CPUC approval is still necessary for the work in those segments. Please note, however, that (as described more fully in the response to Question 2b), SCE believes that it cannot feasibly complete the necessary remediation work in Segments 1 and 2 as exempt work, in the absence of a Permit to Construct. Therefore, without such CPUC approval, SCE likely would be unable to fulfill its commitments made to WECC and the CPUC Safety Enforcement Division.

At this time the schedules of all agencies requiring permit approvals are unknown, but SCE expects the timing will be at least as long as the CPUC's process given the need to retain a CEQA consultant and become familiar with the entire extent of the Proposed Project.

SCE will continue to revisit the project schedule and look for opportunities to reduce the permitting/ licensing and construction schedules as the Project progresses through the regulatory review process. SCE's main driver is to mitigate clearance discrepancies by the identified compliance date.

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

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

To: Energy Division
Prepared by: Kevin Garrity
Job Title: Advisor
Received Date: 2/11/2021

Response Date: 2/25/2021

Question 02d:

Within this response, SCE may consider options such as selective structure replacement with equivalent structures (similar to SCE's "deteriorated pole replacement program"), use of additional interset structures to reduce sag, relocations of structures within the existing franchise easement or public utility easement, and/or replacement of existing conductors for certain segments.

Response to Question 02d:

Please see SCE's response to Questions 1, 2a and 2b of this Data Request.

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

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

To: Energy Division
Prepared by: Gary Busteed
Job Title: Senior Advisor
Received Date: 2/11/2021

Response Date: 2/25/2021

Question 02e:
What environmental protections would be implemented during such actions? Would SCE complete cultural and biological resources surveys? Would field monitors be present during construction?

Response to Question 02e:
SCE implements environmental protections when performing the types actions identified in the response to Question 1 of this Data Request. Depending upon the location of the work, SCE may complete surveys or determine field monitors are necessary for construction. Additionally, SCE is committed to complying with any applicable permit requirements from State and/or federal agencies.

SCE anticipates that construction activities associated with remediating discrepancies on all segments of the Ivanpah-Control Project will require permitting from resource agencies and CEQA and NEPA review, regardless of whether a Permit to Construct is granted for the Proposed Project. The Ivanpah-Control Project Right of Way spans critical habitat for Desert Tortoise, a State and federally threatened species, and core habitat for Mohave Ground Squirrel, a State threatened species. SCE anticipates applying for California Endangered Species Act Incidental Take Permit (ITP) coverage under Fish and Game Code Section 2081 for both species, and ITP coverage under Section 7 of the federal Endangered Species Act for Desert Tortoise. SCE would implement any conservation measures established in the ITP, which may include monitoring and preconstruction surveys.

Additionally, SCE anticipates applying for a Lake and Streambed Alteration Agreement (Fish and Game Code Section 1602) from the California Department of Fish and Wildlife (CDFW), Water Quality Certification (pursuant to Clean Water Act Section 401) from the Lahontan Regional Water Quality Control Board (LRWQCB), and a Clean Water Act Section 404 permit from the Army Corps of Engineers. The existing Right of Way intersects wetlands within Owens Valley (Segment 1) and ephemeral drainages with the Mojave Desert (Segments 3 and 4) that cannot be avoided. SCE will implement all requirements and measures delineated in the 1602, 401, and 404 permits.

Also, if the CPUC does not approve the Proposed Project, either CDFW or the LRWQCB will need to act as the CEQA lead agency since discretionary permits from those agencies will be necessary to complete remediation work, and such discretionary approvals would have to be supported by CEQA review. SCE would then implement all mitigation measures, as well as permit requirements,

established in those approvals and/or CEQA analysis.