

PUBLIC UTILITIES COMMISSION

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April 9, 2015

Susan J. Nelson, AIA
Regulatory Affairs
Southern California Edison
2244 Walnut Grove Avenue, Quad 3D, GO1
Rosemead, CA 91770

RE: SCE Antelope Transmission Project (Antelope-Tehachapi 500kV and 220kV Transmission Line),
Highwind Substation Final Engineering Concurrence to NTP #31

Dear Ms. Nelson,

On March 23, 2015, Southern Californian Edison (SCE) submitted a request for Final Engineering Concurrence for the installation of a concrete panel wall, drainage improvements, and manually operated gate at the Highwind Substation of the Antelope Transmission Project (ATP) in unincorporated Kern County, California. **This Concurrence to Final Engineering is approved by the CPUC for the proposed activities based on the following factors:**

- SCE submitted the following information:

SCE requests a Final Engineering Concurrence for the installation of a concrete panel wall and manually operated gate at the Highwind Substation of the Antelope Transmission Project (ATP) in unincorporated Kern County, California. Subsequent to approval of the Highwind Substation NTPR (NTP #31 dated March 5, 2012) by the CPUC, the need for approval of a concrete panel wall was identified in anticipation of future substation expansion. Design of the wall will be similar to other substation walls approved and constructed as part of the Tehachapi Renewable Transmission Project. SCE is also proposing to construct a manually operated wrought iron sliding or double swing gate at the entrance to the Highwind Substation. According to the Final Environmental Impact Report (FEIR) for the Antelope Transmission Project, Segments 2 and 3 (dated December 2006), SCE is required to "install magnetic coils (or other technology) instead of motion-activated lighting in the entrance road to each transition station to activate low-level, directional lighting at the locked entrance gate" (Mitigation Measures V-16b). The substation entrance road and the proposed manually operated gate will not utilize automatic lighting technology of any kind and, therefore, the requirements of this mitigation are not applicable to the final design of the Highwind Substation.

The following work is proposed for the Highwind Substation (note that all measurements are approximate):

- Concrete Panel Wall with Manually Operated Gate – The existing chain-link fence will be replaced with an 8-foot high concrete panel wall (similar to the walls currently installed at the Whirlwind and Windhub Substations). A manually operated wrought iron sliding or double swing gate would be installed along the road at the entrance to the substation.
 - The west side of the wall will be built 1'6" inside the west side of the existing chain-link fence.
 - The south side of the wall will be built 1'6" inside the south side of the existing chain-link fence.
 - The east side of the wall will be built 10' outside the east side of the existing chain-link fence. The substation pad and gravel will be extended to the newly proposed fence line.

- The north side of the wall will be built 4'6" outside the north side of the existing chain-link fence.
 - A temporary fence will be installed for the north side of the wall during construction for continued security.
 - All existing chain-link fences will be removed after the concrete wall is erected for substation security purposes.
 - The concrete wall will consist of 8-foot high concrete panels and 12-foot spaced center-to-center pillars; barbed wire will be installed per SCE security standards.
 - The existing drainage system within the substation will be modified to accommodate the proposed wall, by adding a v-ditch inside the substation. The current drainage format allows water overflow (such as from the rain) to drain out through the chain link. The v-ditch will allow the water to collect in the ditch and exit the station.
 - A 50-foot temporary construction disturbance area around the proposed wall will be required to perform the work.
- **Biological Resources:** SCE submitted a biological survey report with the RFEC dated March 20, 2015, titled *Biological Survey Report for the Highwind Substation – Proposed Concrete Panel Wall and Manually Operated Gate for Final Engineering Concurrence 3B-#11, Segment 3B Transmission Line, Antelope Transmission Project, Kern County, California*. The biological report documents the biological conditions for the Segment 3B T/L Highwind Substation proposed concrete panel wall and manually operated gate (Project Component) and the 500-foot buffer (Biological Study Area [BSA]). Biological resources within and adjacent to the Project Component were evaluated during several focused surveys, including 2010 and 2011 rare plant surveys (LSA 2010e, ICF 2011gt, ICF and ECORP 2012a); 2008, 2010, and 2011 Swainson's hawk (*Buteo swainsoni*) surveys (LSA 2008b, LSA 2010c, ICF and Bloom 2011d, ICF and Bloom 2012); and burrowing owl (*Athene cunicularia*) and American badger (*Taxidea taxus*) burrow surveys in 2010 (LSA 2010d). The biological resources within and adjacent to the Project Component and 500-foot buffer were also evaluated during preconstruction surveys for general biological resources (P30) and burrowing owl (Owl30) for the Segment 3B T/L, including the Highwind Substation.

Vegetation communities within the Project Component include rabbitbrush scrub and disturbed/developed. Vegetation communities within the 500-foot buffer include California annual grassland, rabbitbrush scrub, and disturbed/developed. No special-status plant species were observed within the Project Component or 500-foot buffer. Impacts to habitat include 1.89 acres of temporary impacts for temporary construction disturbance.

Three special-status wildlife species have been observed within the 500-foot buffer including Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus cyaneus*), and loggerhead shrike (*Lanius ludovicianus*). No burrowing owls, American badgers, or sign of either species were detected within the BSA in 2010, 2011, and 2012. No Swainson's hawks or nests were detected within the BSA during focused surveys conducted in 2010, 2011, and 2012.

Jurisdictional resources within the Project Component were evaluated during the 2011 jurisdictional delineation for Segment 3B (LSA 2011) and a separate field visit on May 16, 2012 to evaluate potential jurisdictional features for additional areas that were not included in the 2011 jurisdictional delineation. Jurisdictional features do occur within the 500-foot buffer; however, no additional impacts will occur. There are no jurisdictional features within the Project Component.

- **Cultural and Paleontological Resources:** SCE submitted a cultural and paleontological resources memorandum with the RFEC dated January 28, 2015 and titled *SCE, TRTP Cultural and Paleontological*

Resources Assessment – RFEC #11 Highwind Substation – Proposed Concrete Panel Wall and Manually Operated Gate. The memorandum states that no cultural resources will be impacted by this RFEC. The area addressed in this RFEC was included in previous cultural resources surveys in support of Segment 3B and no cultural resources were identified (Ahmet et al. 2006, Armstrong et al. 2011, Holm 2011, Holson 2010, Pacific Legacy 2011, Pacific Legacy 2012, Pacific Legacy 2014, Wetherbee 2014).

Previous paleontological assessments for Segment 3B define the geology at the proposed location as Quaternary recent alluvium (Qa) and Quaternary older alluvium (Qoa) (Gust and Scott 2008). Based on the Potential Fossil Yield Classification (PFYC) system, Quaternary recent alluvium has a low potential for containing paleontological resources. Quaternary older alluvium is considered to have a moderate sensitivity for harboring significant paleontological resources. During the construction of the Highwind Substation all ground disturbing activities were monitored for paleontological resources and no paleontological resources were found. Field observations indicate that sediments in the main cut largely consisted of fill material; and trenching activities showed the upper stratigraphy (up to 3 feet in depth) to be fill in some areas or recent alluvium. In addition, the area has been previously disturbed by previous construction or cattle grazing (Aron and Kelly 2013). Ground disturbing activities to construct the proposed concrete panel wall are not expected to exceed 5 feet in depth. Therefore, a paleontological monitor will spot check the construction of the wall at locations where excavations exceed 3 feet.

- **Visual Resources:** The Final Environmental Impact Report for the Antelope Transmission Project addresses visual resources and includes mitigation measures to reduce impacts. The following are applicable to the Highwind Substation:

Mitigation Measure V-1e: Treat Surfaces with Appropriate Colors, Textures, and Finishes. For all structures that are visible from sensitive viewing locations, SCE and its Contractors shall apply surface coatings with appropriate colors, finishes, and textures to most effectively blend the structures with the visible backdrop landscape. For structures that are visible from more than one sensitive viewing locations, if backdrops are substantially different when viewed from different vantage points, the darker color shall be selected, because dark colors tend to blend into landscape backdrops more effectively than lighter colors, which may contrast and produce glare. At locations where a lattice steel tower or a tubular steel pole would be silhouetted against the skyline, non-reflective, light-gray colors shall be selected to blend with the sky. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved. SCE and its Contractors shall submit a Structure Surface Treatment Plan for the lattice steel towers, tubular steel poles, and any other visible structures, demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.

This mitigation measure was included to address the permanent change in landscape character and scenic vistas as seen from KOP 1 – Highway 58 and Jameson Street. The Structure Surface Treatment Plan was approved by the CPUC on July 29, 2008. SCE shall implement this plan in the installation of the concrete wall around the Highwind Substation.

Mitigation Measure V-1f: Establish Evergreen Vegetative Screen. SCE and its Contractors shall establish a permanent evergreen vegetative screen of sufficient height for immediate visual screening around the substation(s), and shall provide permanent drip irrigation system for plant survival. Plant materials selected for screening shall be evergreen, wind-resistant, and acclimated to the desert environment. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved. SCE and its Contractors shall submit a Vegetative Screening Plan for the substation demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.

This mitigation measure was included to address the permanent change in landscape character and scenic vistas as seen from KOP-1 – Highway 58 and Jameson Street. The Highwind Substation, as presently constructed, is not at its full build out design. Currently 3.5 acres has been developed out of the proposed 53 acre master plan. Once the full build out of the substation is proposed, a Vegetative Screening Plan shall be submitted to the CPUC for review and approval.

***Mitigation Measure V-16b: Use Magnetic Coils at Entrance Gate.** Instead of motion-activated lighting, SCE and its Contractors shall install magnetic coils, or other technology, in the entrance road to each transition station to activate low-level, directional lighting at the locked entrance gate.*

This mitigation measure was included to address any new source of substantial light or glare that would adversely affect day or nighttime views in the area. As discussed above, SCE is proposing to construct a manually operated wrought iron sliding or double swing gate at the entrance to the Highwind Substation. Per Mitigation Measure V-16b, SCE is required to “install magnetic coils (or other technology) instead of motion-activated lighting in the entrance road to each transition station to activate low-level, directional lighting at the locked entrance gate”. However, the substation entrance road and the proposed manually operated gate will not utilize automatic lighting technology of any kind and, therefore, the requirements of this mitigation are not applicable to the final design of the Highwind Substation in its current configuration (partial buildout).

The conditions noted below shall be met by SCE and its contractors:

- A paleontological monitor shall spot check the construction of the wall at locations where excavations exceed 3 feet.
- Per MM V-1e, SCE shall implement the Structure Surface Treatment Plan in the installation of the concrete wall at the Highwind Substation.
- Per MM V-1f, once the full build out of the substation is proposed, a Vegetative Screening Plan shall be submitted to the CPUC for review and approval
- All conditions required by the Highwind Substation Notice to Proceed (NTP) #31 shall apply to the subject area and activities.
- Copies of all relevant permits, compliance plans, NTP #31, and this Concurrence of Final Engineering shall be available on site for the duration of construction activities where applicable.

Sincerely,



John Boccio
CPUC Environmental Project Manager

cc: V. Strong, Aspen