

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
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October 30, 2012

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), Segment 3B: Final Engineering Concurrence for the Segment 3B Additional AC Mitigation – Zinc Ribbon and Ground Rods

Dear Ms. Nelson,

On October 19, 2012, Southern California Edison (SCE) submitted a request for Final Engineering Concurrence for additional AC mitigation, including installation of zinc ribbon and ground rods, on the Segment 3B Transmission Line (T/L) 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 Final Engineering Concurrence for additional AC mitigation, including installation of zinc ribbon and ground rods, on Segment 3B T/L of the ATP in unincorporated Kern County, California. Subsequent to approval of Segment 3B T/L NTPR for Structures 15 – 78 (NTP #32 dated March 20, 2012), and the addendum for gas pipeline protection facilities (dated March 14, 2012) by the CPUC, final design was completed, resulting in the need for additional horizontal wires (zinc ribbon) and relatively short ground rods (installed to a depth of approximately 70 feet) emplaced at the ends of the exposed pipe sections. These newly proposed electrodes are needed to contain pipe touch potentials to nominally safe levels in the regions where the pipe is exposed.

New impacts associated with this Final Engineering Concurrence includes: 0.604 acres of additional temporary impacts, and no permanent impacts.

The following changes are proposed for Segment 3B T/L (note that all measurements are approximate):

1. Two ground rods (PGE-B-RGR1 and PGE-B-RGR2) and 540 feet of zinc ribbon (PGE-B-ZR1) located 800 feet north, northeast of Structure 3B-44. A temporary work area measuring 0.709 acre will be required for construction (of this, 0.497 acre is new disturbance area not previously approved in NTP #32 or the gas pipeline protection facilities addendum). A previously approved access road would be used to reach the site.
2. One ground rod (PGE-B-RGR3) located 650 feet north, northwest of Structure 3B-45. A temporary work area measuring 0.105 acre will be required for construction (of this, 0.024 acre is new disturbance area not previously approved in NTP #32 or the gas pipeline protection facilities addendum). A previously approved access road would be used to reach the site..

3. One ground rod (PGE-A-RGR1) located 250 feet west of Structure 3B-44. Construction activities will occur within a previously approved work area; no new disturbance areas will be required. A previously approved access road would be used to reach the site.
4. One ground rod (PGE-A-RGR2) located 250 feet east of Structure 3B-44. Construction activities will occur within a previously approved work area; no new disturbance areas will be required. A previously approved access road would be used to reach the site.
5. One ground rod (PGE-A-RGR3) located 350 feet northeast of Structure 3B-45. Construction activities will occur within a previously approved work area; no new disturbance areas will be required. A previously approved access road would be used to reach the site.
6. Two ground rods (PGE-A-RGR4 and PGE-A-RGR5) and 140 feet of zinc ribbon (PGE-B-ZR3) located 150 feet northwest of Structure 3B-46. A temporary work area measuring 0.136 acre will be required for construction (of this, 0.063 acre is new disturbance area not previously approved in NTP #32 or the gas pipeline protection facilities addendum). A previously approved access road would be used to reach the site.
7. Two ground rods (PGE-A-RGR6 and PGE-A-RGR7) and 250 feet of zinc ribbon (PGE-B-ZR4) located 150 feet north, northeast of Structure 3B-46. A temporary work area measuring 0.289 acre will be required for construction (of this, 0.016 acre is new disturbance area not previously approved in NTP #32 or the gas pipeline protection facilities addendum). A previously approved access road would be used to reach the site.
8. One ground rod (PGE-A-RGR8) and 410 feet of zinc ribbon (PGE-B-ZR5) located 200 feet northwest of Structure 3B-47. A temporary work area measuring 0.464 acre will be required for construction (of this, 0.064 acre is new disturbance area not previously approved in NTP #32 or the gas pipeline protection facilities addendum). A previously approved access road would be used to reach the site.

- **Biological Resources:** SCE submitted a biological survey report titled *Biological Survey Report for Installation of Additional PG&E Zinc Ribbon and Ground Rods, Alternating Current Gas Pipeline Mitigation, Antelope Transmission Project, Kern County, California* dated October 19, 2012. The report documents the biological conditions for Segment 3B Alternating Current (AC) Gas Pipeline Mitigation proposed additional PG&E zinc ribbon and ground rods (Project Component). The Project Component plus the 500-foot buffer are referred to as the 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); 2008, 2010, and 2011 Swainson's hawk surveys (LSA 2008b, 2010c; ICF and Bloom 2011e); 2007, 2008, 2010, and 2011 desert tortoise surveys (LSA 2007, 2008a, 2010a; ICF and ECORP 2011b); and burrowing owl and American badger burrow surveys in 2010 (LSA 2010d). The Project Component areas were also included in the 2012 focused surveys for special-status plants, including vegetation mapping; desert tortoise; and Swainson's hawk. The biological resources within and adjacent to the Project Component and BSA were also evaluated during preconstruction surveys for general biological resources and burrowing owl for Segment 3B T/L. As part of the Segment 3B T/L and AC Gas Pipeline Mitigation work, biological construction monitoring has been ongoing regularly since the sites became active, and species events and nest events are recorded in the Field Reporting Environmental Database (FRED). As a Biological Opinion or an Incidental Take Permit was not obtained for the ATP, work will avoid impacts to listed plants and wildlife.

Vegetation communities within the Project Component include Mojavean juniper woodland and scrub, California annual grassland, and disturbed/developed. Vegetation communities observed within the 500-foot buffer include California annual grassland, Mojave desert wash scrub, Mojave mixed woody scrub, Mojavean juniper woodland and scrub, southern willow scrub, Joshua tree woodland, and disturbed/developed. No special-status plants were observed within the Project Component during special-

status plant focused surveys. Bakersfield cactus (*Opuntia basilaris* var. *treleasei*) were observed within the 500-foot buffer during the 2011 and 2012 special-status plant focused surveys.

Previous focused burrowing owl (*Athene cunicularia*) surveys for Segment 3B were positive for burrowing owl features within the BSA (LSA 2010d; FRED). Prairie falcon (*Falco mexicanus*), Swainson's hawk (*Buteo swainsoni*), and migrant willow flycatcher (*Empidonax traillii*) of unknown subspecies were detected during construction monitoring and desert tortoise focused surveys in 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. No jurisdictional features occur within the Project Component; however, several jurisdictional features are present within the 500-foot buffer. These features will not be affected by construction activities. If any potential features are subsequently identified, they will be flagged for avoidance or the applicable permits will be obtained.

There are no additional permanent impacts associated with this Final Engineering Concurrence. Temporary impacts associated with this Final Engineering Concurrence include 0.604 acres of temporary impacts. Of which 0.592 acre is Mojavean juniper woodland and scrub and California annual grassland (desert tortoise habitat). Temporary impacts will be mitigated on-site per the Habitat Restoration and Revegetation Plan (HRRP) and APM BIO-2, which include SWPPP requirements, weed control (Mitigation Measure [MM] B-27b), and visual resources (MM V-1c and MM V-9).

No additional impacts to biological resources are anticipated.

- **Cultural Resources:** SCE submitted a memorandum titled *Southern California Edison Tehachapi Renewable Transmission Project Cultural and Paleontological Resources Requirements for Segment 3B – Request for Final Engineering Concurrence #8 for Installation of Zinc Ribbon and Ground Rods*, dated October 18, 2012. The memorandum states that all the construction areas where this Request for Final Engineering Concurrence (RFEC) #8 will take place were previously surveyed for cultural resources and assessed for paleontological resources (Ahmet et al 2006, Gust and Scott 2009, Holm 2012a, Holm 2012b, Pacific Legacy 2012a, Pacific Legacy 2012b). The results of these studies indicate that no known cultural or paleontological resources will be impacted during implementation of the proposed RFEC #8 as long as the requirements listed below are followed.
 - A paleontological monitor will be required during ground disturbing activities on native soils associated with proposed Zinc Ribbon PGE-B-ZR1. Paleontological monitoring will be suspended if field observations indicate that all ground disturbing activities associated with the installation of the zinc ribbon occur within previously disturbed soils from the original installation of the pipeline.
 - A cultural resources monitor must be present during installation of ground rod PGE-A-RGR1.

No additional impacts to cultural or paleontological resources are anticipated.

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

- Per the Paleontological Resources Management Plan (PRMP), a paleontological monitor is required to monitor Proposed Change Site 1 (Zinc Ribbon PGE-B-ZR1).
- Per the CPMP, a cultural resources monitor shall be present during activities at Proposed Change Site 3 (installation of ground rod PGE-A-RGR1).

- All conditions required by Notice to Proceed (NTP) #32 shall apply to the subject area and activities.
- Copies of all relevant permits, compliance plans, NTP #32, 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