

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 11, 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 Pipeline Protection Facilities

Dear Ms. Nelson,

On May 22, 2012, Southern California Edison (SCE) submitted a request for Final Engineering Concurrence for the Pipeline Protection Facilities on Segment 3B Transmission Line (T/L) of the Antelope Transmission Project (ATP) in unincorporated Kern County, California. Additional information was submitted on June 15 and 27, 2012. **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 to the Pipeline Protection Facilities on Segment 3B T/L of the ATP in unincorporated Kern County, California. Subsequent to the CPUC approval of the Segment 3B Pipeline Protection Facilities, final design was completed for the pipeline protection facilities required for the El Paso National Gas and Pacific Gas & Electric pipelines that are within the vicinity of the Segment 3B transmission line. Changes to the project design were brought about by additional requirements proposed by the two pipeline operators as well as additional environmental concerns from Project principals. Additional constraints to design of the induced alternating current (IAC) mitigation features include:

- Necessity to mitigate IAC voltages to levels that would preclude AC corrosion on the pipelines at small defects in the coating.
- Avoidance of mitigation features in designated wetlands areas.
- Provision for AC corrosion monitoring test stations.
- Provision for cattle guards for all new aboveground appurtenances on the pipelines.

In order to properly address all of the above concerns, revised data was integrated into a computer model of the combined right-of-way, and a revised mitigation scheme was developed to optimize the overall grounding plan.

The installation of gas pipeline protection features including deep ground rods, zinc ribbon, and gradient control mats. This request for Final Engineering Concurrence includes these facilities with slight modifications, but also includes several test stations which were not previously approved by CPUC. Test stations are required for operation and maintenance on the gas pipelines. Test stations will allow pipeline workers to take necessary electrical readings on the pipe. Test stations will be installed above-ground and connected to the gas pipeline as provided in final engineering design. Test stations will be approximately

three (3) feet above ground level and will be protected by metal cattle guards. Test stations will be installed at all ground rod locations and in a number of other locations as specified by final engineering. Changes between the approved gas pipeline protection features and the proposed gas pipeline protection features are described below:

Deep Ground Rods

Number Previously Approved: 35

Number Proposed in Final Engineering: 32

Disturbance Area Previously Approved: 4.40 acres

Disturbance Area Proposed in Final Engineering: 9.07 acres

Approved deep ground rod depths ranged from 50 feet to 509 feet. Deep ground rod depths per final engineering range from approximately 404 feet to 887 feet.

Zinc Ribbon/Gradient Control Mat/Above Ground Pipe

Number Previously Approved: 23

Number Proposed in Final Engineering: 4 (no above-ground pipe features included in proposed design)

Disturbance Area Previously Approved: 3.75 acres

Disturbance Area Proposed in Final Engineering: 1.61 acres

Test Stations

Number Proposed in Final Engineering: 40

The test stations are attached to the ground rods and do not require additional ground disturbance.

The revised mitigation scheme also results in changes to the access roads required to construct the facilities. A summary of the access road type and approximately disturbance area for this request for Final Engineering Concurrence compared to the CPUC approval is provided below:

Access Road Type	CPUC Approval Approx. Disturbance Area (acre)	Request for Final Engineering Concurrence Approx. Disturbance Area (acre)
Existing, requires improvement	9.21	2.72
Existing, no improvement required	0	0
Overland travel	0.25	0.59
New, temporary	0.25	1.09

SCE provided the location of the access roads required to construct proposed gas protection features on revised maps.

- Biological Resources:** SCE submitted biological information with the request for Final Engineering Concurrence. Vegetation communities within the Project Component include bunchgrass grassland, California annual grassland, desert bunchgrass grassland, Joshua tree woodland, Mojave desert wash scrub, Mojave mixed woody scrub, Mojavean juniper woodland and scrub, rabbitbrush scrub, and disturbed/developed. No burrowing owl or sign of the species were observed in the Project Component. Sign of burrowing owl was observed within the 500-foot buffer. No desert tortoise, Mojave ground squirrel, or Swainson's hawk were observed within the BSA during prior surveys and during on-going surveys in 2012. American badger, desert kit fox, ringtail, LeConte's thrasher, loggerhead shrike, prairie falcon, Swainson's hawk, and willow flycatcher were observed within the 500-foot buffer. Bakersfield cactus and Mojave Indian paintbrush were observed within the Project Component and 500-foot buffer. Jurisdictional features are located within the Project Component and the 500-foot buffer and areas that cannot be avoided from impacts are included in the CDFG Lake and Streambed Alteration permit application. Any potential jurisdictional features that may be identified will be flagged for avoidance. If any jurisdictional features

cannot be avoided, a CDFG Streambed Alteration Agreement (SAA) or Amendment would be secured and impacts would be mitigated based on the terms of the SAA and any other regulatory permits.

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 Guidelines for Segment 3B – Final Engineering Concurrence Request* dated June 13, 2012. The memorandum states that the results of cultural resources records search, surveys, testing and evaluations conducted in support of Segment 3B of the TRTP indicate that there are cultural resources located along the areas proposed in this Final Engineering Concurrence Request (Ahmet et al, 2006; Holm 2012a; Holm 2012b; Pacific Legacy 2012a; Pacific Legacy 2012b). All but two of the cultural resources recorded and associated with this request for Final Engineering Concurrence are located outside the direct impact area as currently designed and therefore can be avoided. These locations will be flagged as Environmentally Sensitive Areas (ESAs) prior to the start of any construction activities and an archaeological monitor will be present during ground disturbing activities associated with those locations. The zinc ribbons associated with Constructs 3B-44 and 3B-45 are located along two archaeological sites that have been evaluated and determined significant (eligible for the California Register of Historical Resources – CRHR). However, the disturbance area associated with the installation of the zinc ribbon as currently designed is restricted to an area that was highly disturbed in the past during the installation of the PG&E Gas Line 300A. Therefore, installation of the zinc ribbon in this area is not expected to have a significant impact on the resource. Per the Construction Phase Management Plan (Pacific Legacy 2012a), an archaeological monitor is required during all ground disturbing activities associated with the installation of the zinc ribbon in this area. A cultural resource also crosses the road leading to PGE-A-TS M225.78 and the site has not been evaluated for eligibility to the CRHR. Impacts to the site will be avoided by installing appropriate ESA signs indicating that no grading or road improvement is allowed within the site boundary. If road improvements are needed for the installation and maintenance of the testing location then the site will be tested and evaluated for eligibility to the CRHR. If the site is found to be eligible, a data recovery program will be implemented prior to construction activities.


The Paleontological Resources Management Plan (PRMP) indicates that elements of the proposed request for Final Engineering Concurrence are located in areas that have the potential to yield paleontological resources (Gust and Scott 2009). A paleontological monitor will be required during ground disturbing activities along those locations.

No additional impacts to cultural or paleontological resources are anticipated.

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

- Per the Construction Phase Management Plan, archaeological monitoring shall be conducted during all ground disturbing activities associated with the installation of the zinc ribbon near Constructs 3B-44 and 3B-45.
- Per the PRMP, paleontological monitoring shall be conducted for all ground disturbing activities in areas that have the potential to yield paleontological resources.

Sincerely,



John Boccio
CPUC Environmental Project Manager

cc: V. Strong, Aspen