Southern California Edison
Lakeview A.10-09-016

DATA REQUEST SET Lakeview-CPUC-Verbal-01

To: CPUC
Prepared by: Rosalie Barcinas
Title: Project Manager
Dated: 05/11/2011

Question 01:

Please provide a review/assessment on the feasibility to construct a portion of the subtransmission source line underground. The portion of the line to be reviewed is located between 10th and 11th street.

Response to Question 01:

Typically, electric lines with voltages greater than 50 kV are constructed overhead. Overhead lines usually create less construction and long-term environmental impacts, are easier to maintain, and cost substantially less than lines constructed underground. For the Proposed Project, there are no technical advantages to constructing the proposed 115 kV subtransmission lines underground.

At the request of the CPUC, SCE has completed a conceptual review to underground a portion of the proposed subtransmission line within the Lakeview Substation Project. Specifically, SCE reviewed the portion of the proposed 115 kV subtransmission line from the Proposed Substation south along the future extension of Reservoir Avenue to 11th Street. SCE's conceptual review included both the technical feasibility as well as the potential environmental impacts associated with underground construction for this portion of the project (as compared to the proposed overhead construction).

Technical Feasibility

Based on a conceptual review, underground construction is technically feasible for this portion of the proposed subtransmission line. It would require an approximate 30-foot right of way with limited secondary land uses. For example, any land use or activities that would result in a change in grade that would not provide a minimum of 36" of cover over SCE's underground facilities would be restricted within the underground easement portion of SCE's right of way in order to protect the underground facilities over the long term. The County of Riverside's General Plan designates the extension of Reservoir Avenue to be used as an Urban Arterial with an approximate right of way of 152 feet. If construction of Reservoir Avenue, as identified in the General Plan, results in substantial grade changes, a potential rebuild/relocation could be necessary in order to maintain required underground clearances. Underground construction for this portion of the project would also cost more than the proposed overhead construction.

Potential Environmental Impacts

Included is a review of the potential environmental impacts from underground construction when compared to the proposed overhead construction. It is based on a conceptual review only.

Air Quality and Greenhouse Gas Emissions: The undergrounding of the subtransmission line in this location would not result in any changes to the significance conclusions made in the PEA. However, underground construction of the subtransmission line would result in slightly increased VOC (+3.9 lbs/day), CO (+27 lbs/day), and NOx (+14.8 lbs/day) peak daily emissions, as well as slight increases to CO (+3 lbs/day) and NOx (+11 lbs/day) on-site emissions during construction. Total greenhouse gas emissions would increase 57 metric tons. The sum total of greenhouse gas emissions during construction amortized over 30 years and annual operation greenhouse gas emissions would increase by approximately 2 metric tons/year.

Agriculture and Forest Resources: The PEA concluded that for the Proposed Project, 13.50 acres of farmland would be permanently impacted. This section of underground subtransmission line, combined with other project components, would result in approximately 13.23 acres of farmland permanently impacted. In addition to the 13.23 acres, approximately 0.10 acres would be restricted from the use of heavy equipment and deep-rooted plants, which have the potential to interfere with the underground system. The Proposed Project assumed a conversion of land would occur for set clearances around the proposed overhead facilities and for the access road. The underground subtransmission line assumes a conversion of land would occur for set clearances around the riser poles and vaults, an access road, and potentially for restricted uses above the underground trench.

Aesthetics: The undergrounding of the subtransmission line in this location would have the potential to reduce, but not eliminate, the project's visibility to the public. There is still potential for some aboveground facilities (e.g., riser poles and protective bollards) to be visible in this location. Therefore, the impact would remain less than significant, as determined for the Proposed Project in the PEA.

The following resources are also not likely to result in any changes to the conclusions made for the Proposed Project in the PEA: Biological Resources; Cultural Resources; Geology, Soils and Seismicity; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population and Housing; Public Services; Recreation; Transportation and Traffic; and Utilities and Service Systems.