

Southern California Edison
WODUP A.13-10-020

DATA REQUEST SET A.13-10-020 WODUP ED-SCE-15

To: ENERGY DIVISION
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Title: Project Engineer
Dated: 03/30/2015

Question ALT-28:

Based on identified visual impacts, the CPUC is considering an underground alternative for a short segment of the new proposed 66 kV San Bernardino-Redlands-Tennessee subtransmission line in the City of Redlands. At the north end of the segment, the 66 kV subtransmission line proposed by SCE would transition from overhead to underground in Iowa Street approximately 550 feet north of Orange Avenue. The 66 kV subtransmission line would remain underground in new conduit within Iowa Street for approximately 1,500 feet to the south, where it would transition from underground to overhead approximately 350 feet north of Barton Road. It is assumed that the conductor, trench, underground facilities, and construction activities would be similar to SCE's proposed for the underground segments of the relocated 66 kV subtransmission lines that are already part of SCE's West of Devers Upgrade Project.

Based upon preliminary engineering, please describe:

- (a) The location of existing utilities (e.g., water, gas, electrical, sewer, gas, etc.) along this segment of Iowa Street;
- (b) Approximately where the 1,500-foot underground line would be located in the roadway;
- (c) Whether SCE has identified any concerns regarding the feasibility of this underground segment.

Response to Question ALT-28:

- (a) SCE has no existing knowledge of the underground utilities that may currently be located along Iowa Street between Barton Road and approximately 550 feet north of Orange Avenue. To obtain the information requested, a typical underground utility look-up would need to be requested from the other utilities (gas, telephone, water, sewer, electrical, cable television, storm drainage, etc.). Based on prior experience, SCE would expect the overall process to take approximately 4-6 weeks between the initial request and a finished basemap that could then be used for design purposes. However, based on the observed current level of development in that area, SCE does not have any reason to conclude that there would be insufficient space somewhere within the current roadway width to place a new subtransmission conduit system.

- (b) Until the results of a complete underground utility look-up process are completed, as described in (a) above, SCE is not in a position to confidently designate a particular alignment location for any new subtransmission conduit system within the identified roadway width.

- (c) SCE would need the results of the completed underground utility look-up to make a more confident determination of feasibility for undergrounding this segment, however with the limited information available, SCE does not currently see any significant concerns regarding the feasibility of constructing this undergrounding proposal. However, SCE does have a couple of suggestions to improve the proposed scope, as well as comments regarding the purpose of this potential underground alternative and other solutions that may better address the perceived concern.

In order to avoid the need to install an underground conduit system through a single-lane bridge that crosses a historic drainage feature located approximately 325 feet north of the centerline intersection of Orange Avenue and Iowa Street, SCE recommends that this proposed underground alternative begin approximately 275 feet north of that centerline intersection (as opposed to the 550 foot distance indicated in the data request). SCE also recommends extending the underground segment further south and installing the required TSP riser pole on the south side of Barton Road, in-line with the existing overhead portion of the San Bernardino-Redlands-Tennessee 66 kV subtransmission line running east-west along that alignment.

Without having an opportunity to review the analysis that identified the potential “visual impacts” affecting this short portion of the subtransmission route, SCE is concerned that this proposal, while likely feasible from a construction perspective, is not practical nor necessarily warranted. Given that there are existing overhead subtransmission facilities running east-west along both Orange Avenue and Barton Road, as well as overhead distribution facilities running on Iowa Street north of Orange Avenue, it does not appear that the installation of similar facilities along the 1,400-foot long block of Iowa Street south of Orange Avenue to Barton Road creates a change to the existing visual character of the area that is significant enough to warrant undergrounding. If the CPUC is concerned about a potential visual impact, a more typical approach would be to require the use of similar-type poles so that the area where new overhead poles are to be constructed have the same appearance as existing poles in the area. In the case here, the existing area is blanketed with similar-sized wood poles. As such, an alternative that requires wood poles could also lessen the potential visual impact associated with SCE’s Proposed Project that includes the potential installation of lightweight steel poles (LWS) for this subtransmission segment. Another consideration the CPUC may want to take into account in its analysis is the cost and schedule impacts associated with undergrounding. Based on a cursory review for the purpose of this response, SCE

estimates that this undergrounding proposal would increase the cost of the Proposed Project by approximately \$1.5-2.0 million and add approximately two months to the subtransmission construction schedule. It would also likely result in a significant increase of the construction impacts to this limited geographic area, including extended lane and/or road closures during the conduit and vault installation process.