

*Southern California Edison*  
**Presidential Substation Project A.08-12-023**

**DATA REQUEST SET Presidential ED-04**

**To:** ENERGY DIVISION  
**Prepared by:** Jessica Jackson  
**Title:** Licensing Project Manager  
**Dated:** 06/09/2010

---

**Question 01:**

**Project Description**

Provide a revised description of the proposed project including any changes to the figures, construction methodologies, emissions, substation drawings, pole locations and subtransmission and distribution line alignments presented in the PEA to reflect design changes.

**Response to Question 01:**

In response to Data Request Set: Presidential ED-04, enclosed for review is an engineering design update which represents a culmination of efforts to provide more detailed route information in order to assist the Commission in its review of the proposed Presidential Substation Project. In addition to the more detailed route information, the design update also includes clarifications to the Proponents Environmental Assessment (PEA) and clarifications to prior data requests. To facilitate the Commission's review of the material provided, the following summary highlights design adjustments to supplement the original design as submitted in SCE's project application dated December 22, 2008.

**Undergrounding of 16 kV Distribution Along or Near the 66 kV Subtransmission Route Where Tubular Steel Poles are Proposed**

In the PEA, SCE proposes two 66 kV subtransmission source lines to be attached to a single pole line along the subtransmission line route. If these two 66 kV subtransmission source lines were to be attached to wood poles or lightweight steel poles, the integrity of the substation and source lines could be jeopardized in a catastrophic event. Therefore, SCE proposed to locate the two 66 kV subtransmission source lines onto engineered tubular steel poles (TSPs), which are more robust and are more likely to sustain a catastrophic event. However, it was later determined by SCE that the TSPs are unable of supporting distribution underbuild in this particular location. This poses a challenge because 16 kV distribution facilities are currently in place along the proposed 66 kV subtransmission route. Therefore, SCE undertook an evaluation of the following design considerations to address the integration of the existing 16 kV distribution system along the proposed 66 kV subtransmission line route:

- Future Use Integration
  - TSPs must be designed for all known and anticipated future use, including any

- distribution and communication facilities that may be attached.
- The TSPs proposed for this project would be installed in an area where the land is not fully developed. There are vacant and agricultural lots that may be developed at a future date. It would be impossible to fully understand what these uses could be, and how these would affect the future uses of the TSPs.
  - Attachment of distribution apparatus to TSPs
    - Engineering best practices do not allow some distribution and communication apparatus needed for the project to be attached to TSPs.
  - System Reliability
    - TSPs are being specified for the Presidential Substation project for system reliability. The addition of distribution apparatus could compromise the reliability of the 66 kV subtransmission facilities. In the event of a catastrophic incident, such as a distribution transformer failure or a vehicular impact to the poles, the integrity of the 66 kV lines serving the substation could be jeopardized.
  - Number of Structures Required
    - The co-location of distribution, communication, and subtransmission circuits would cause the need for approximately 10 additional wood poles to accommodate the existing distribution tap point clearances into customer's homes in compliance with CPUC General Order 95. (G.O. 95).
    - In addition, because the TSPs cannot accommodate the distribution and communication apparatus, co-locating the distribution, communication and subtransmission overhead would require a separate line of distribution wood poles. These wood poles would be inter-set within the same right of way, between the proposed TSPs. This would result in an increase in the number of structures for the design.

After considering the above factors, SCE is proposing to underground the 16 kV distribution and the communication facilities from the intersection of Sunset Valley and Read Road to the Proposed Substation. A summary of the work is set forth below. For more detailed information, please see the enclosed materials.

### **Undergrounding of 16 kV Distribution Near the Subtransmission Line Connection to Existing Subtransmission Source Lines**

SCE has proposed two Subtransmission Line Connections near the intersection of Sunset Valley Road and Tierra Rejada Road and near the intersection of Moorpark Road and Read Road. In order to comply with G.O. 95 clearances, SCE is proposing to underground the 16 kV distribution facilities at each of these locations.

### **Undergrounding of the 66 kV Subtransmission Line under Highway 23**

In the PEA, SCE originally proposed to cross State Highway 23 with an overhead 66 kV subtransmission line. When SCE met with Caltrans in March 2010 to discuss SCE's proposed overhead design at the freeway crossing, Caltrans expressed that the overhead design of the SCE

facilities (TSP and access road within Caltrans right of way) would not comply with the Caltrans Encroachment Permit requirements. Based on the input from Caltrans, SCE is now proposing to underground the 66 kV Subtransmission Line where it would cross State Highway 23. These modifications are reflected in the enclosed materials along with detailed construction activities for the proposed underground crossing.

### **Modifications to Existing Street Lights Along or Near the 66 kV Subtransmission Route**

In order to accommodate the updated 66 kV Subtransmission route design, SCE will need to modify three existing streetlight/wood pole combinations. These modifications are reflected in the enclosed materials.

### **Access Road Design between Highway 23 and Olsen/Madera Road**

In the PEA, SCE originally proposed the access road between Highway 23 and Olsen/Madera Road to be parallel to the proposed 66 kV Subtransmission Line route. Upon additional engineering, SCE determined that the access to the proposed structure locations was not compatible with the local terrain. Therefore, SCE is proposing a modified access road design between Highway 23 and Olsen/Madera Road. The access road modifications are reflected in the enclosed materials.

### **Cultural Resource Applicant Proposed Measures**

SCE has identified additional Cultural Resource Applicant Proposed Measures (APMs). These APMs are reflected in the enclosed materials.

### **Additional Updates to the PEA**

In addition to SCE's design update, the enclosed materials contain a redline of PEA Chapter 3 containing other various updates and corrections.

### **Biological Surveys**

SCE has been conducting various biological surveys for the proposed project inclusive of those areas identified in the design update. The surveys include the following:

1. Jurisdictional Wetland Delineation
2. Fairy Shrimp Habitat Assessment
3. Sensitive Plant Surveys

These biological survey reports are included in the enclosed materials.

An additional biological survey for the California Gnatcatcher will be completed by September 17, 2010, and will be submitted under separate cover.

### **Materials Submitted for CPUC Data Request ED-04**

1. Redline of PEA Chapter 3 to reflect design changes
2. Updated project maps, and figures (note updated visual simulations will be sent under separate cover as an update to this data request during the week of August 2, 2010, under separate cover)
3. Proposed Cultural Resource APMs (Update to PEA Table 4.5-3)
4. Biological Reports - Jurisdictional Wetland Delineation, Fairy Shrimp Habitat Assessment, and the Sensitive Plant Surveys

9 attachments



Presidential Design Update\_Redline of PEA Chapter 3.pdf



PresidentialConstruction Area Highway 23.pdf



Presidential Conceptual Bore Construction at SH 23.pdf



Presidential Figure3-3.pdf



Presidential Pole Map Book.pdf



Presidential Jurisdictional Delineation Report. pdf.pdf



Presidential Plant Habitat Letter.pdf



Fairy Shrimp Habitat Assessment Survey Letter.pdf



Proposed Cultural Resource APMs.pdf