

*Southern California Edison*  
**MESA PTC A.15-03-003**

**DATA REQUEST SET A1503003 ED-SCE-05**

**To:** ENERGY DIVISION  
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**Question 02.b:**

A study, using SCE-provided data, demonstrates that one 500-kV transformer bank at a 500-kV Mesa Substation would address low voltage in the Serrano corridor following an outage of the Eco-Miguel 500-kV Transmission Line followed by an outage of the Ocotillo-Suncrest 500-kV Transmission Line (“500-kV N-1-1 contingency”). Refer to the study in Attachment 2. Provide the following information about a reduced substation alternative that would consist of one 500-kV transformer bank:

- B. Would it be feasible to construct a 500-kV substation with one transformer bank west of the existing 230-kV substation? Explain why or why not.

**Response to Question 02.b:**

Based on SCE's reply to Data Request Question 2.A, this question is moot as a single transformer bank would NOT meet NERC, WECC, and CAISO reliability standards.

However, in theory, there is sufficient space available west of the existing 230 kV substation to construct only those facilities necessary to support a 500 kV substation with one transformer bank. These facilities would consist of a 3-position 500 kV switchrack, four single-phase 500/230 kV transformer units (resulting in one three-phase transformer bank and a spare unit), and the necessary 230 kV deadend structures to connect the low-side of the transformer bank to the existing 230 kV switchrack.

Note: This response does not include the necessary modifications to the existing 500 kV and 230 kV transmission lines that currently exist in the area west of the existing 230 kV substation. See SCE's reply to Data Request Question 2.C for more details.