

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

DATA REQUEST SET A1503003 ED-SCE-02

**To: ENERGY DIVISION
Prepared by: Daniel Donaldson
Title: Power System Planner
Dated: 07/22/2015**

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Question 08:

The CPUC is requesting data related to a potential alternative that would involve installing additional reactive support at other SCE substations:

- A. Has SCE considered installing additional capacitors or a static var compensator at the Barre Substation?
- B. If this alternative has been considered, please provide the rationale as to why this alternative was rejected.
- C. Please describe if it is technically feasible to install additional capacitors or a static var compensator at the Barre Substation and what work would be involved to install such equipment at the Barre Substation.
- D. If enough voltage support could not be feasibly installed at Barre Substation to meet reliability standards, describe whether voltage equipment could be installed at another substation or a combination of other substations in SCE's service area to meet the relevant reliability standards.

Response to Question 08:

- A. Yes.
- B. Voltage support at Barre and other substations in the Western LA Basin would not be sufficient to address relevant reliability standards in the area. Voltage support supplies reactive power which could aid in reducing transmission losses and improve voltage performance in the area allowing an incremental increase in transfer capability across existing transmission lines. However, this increase is not sufficient to provide the real power import requirement necessary to reliably serve load in the Western LA Basin.
- C. It is not feasible to expand the 220 kV switchrack at Barre Substation to accommodate

the installation of such equipment. There are no available 220 kV positions at Barre Substation. Due to the substation layout, expanding the 220 kV switchrack would require a substation rebuild as the switchrack is adjacent to a street on the West side, and the East side is perpendicular to the existing 66 kV switchrack.

D. See Response B.