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

DATA REQUEST SET A1503003 ED-SCE-05

To: ENERGY DIVISION Prepared by: Daniel Donaldson Title: Power System Planner Dated: 09/18/2015

Question 03.c Supplemental:

Page 2-4 of the PEA states that the N-1-1 contingency involving 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") would result in voltage collapse. In response to Data Request #2, Follow Up 01 Q.04-01(C), SCE states that this 500-kV N-1-1 contingency would result in "voltage issues . . . located at substations spread throughout the Western LA Basin." In response to Data Request #3, in SCE's Attachment A, SCE states that the 500-kV N-1-1 contingency would cause "low voltages [to] occur."

However, in a study of the 500-kV N-1-1 contingency with SCE-provided data, the CPUC was unable to substantiate SCE's claim of a voltage collapse or voltage issues located at multiple substations. Only the Serrano Substation, with a voltage of 0.897 pu, was noted as experiencing a voltage below that allowed by CAISO Transmission Planning Standards, Table 1, in the event of a 500-kV N-1-1 contingency. Refer to the study in Attachment 3.

Provide the following information about the voltage collapse and/or voltage issues identified by SCE following the 500-kV N-1-1 contingency:

C. State whether tap changing at Serrano Substation would address the low voltage issue at the Serrano Substation.

Response to Question 03.c Supplemental:

While tap changing at Serrano Substation would result in improvements to base case voltages, it is not sufficient to prevent the voltage collapse identified in Part A.