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

DATA REQUEST SET A1503003 ED-SCE-02 Follow-Up

To: ENERGY DIVISION
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Question 01.A (04-01):

Remedial Actions to Address N-1-1 Scenario

Please provide the following information regarding remedial actions taken for the second outage in the N-1-1 contingency studied for the Mesa Substation:

A. Describe the outcome of SCE's examination of each of these remedial actions to address voltage issues arising in an N-1-1 contingency:
    a. Redispatch of generation
    b. Implementation of fast acting demand response
    c. Dispatch of available preferred resources and energy storage.

Response to Question 01.A (04-01):

The Proposed Project was approved as part of the 2013-14 CAISO Transmission Planning Process (TPP) and an updated analysis was performed as part of the 2014-15 TPP. The Energy Division, in consultation with the CEC, worked to develop the coordinated assumptions used in the CAISO 2014-2015 TPP. These assumptions are outlined in Rulemaking 13-12-010. This document entitled "Assigned Commissioner's Ruling Technical Updates to Planning Assumptions and Scenarios for use in the 2014 LTPP and 2014-15 CAISO TPP" (ACR) outlined a "Trajectory Scenario" to be used for resource and infrastructure planning, designed to reflect a modestly conservative future world (ACR p. 35). The ACR provided forecasts for (b) fast acting demand response as well as (c) preferred resources and energy storage (ACR p. 17-22) and instructed the CAISO to use this scenario in their 2014-15 TPP (ACR p. 35-36).

As part of the TPP, SCE worked with the CAISO to analyze the effectiveness of these remedial actions to address the N-1-1 voltage issues. CAISO determined that the Proposed Project as well as use of items a-c was necessary to address the critical N-1-1 contingency. These items alone were insufficient to fully mitigate the critical N-1-1. With inclusion of the Proposed Project, (a) redispatch of generation, and the use of all forecasted resources (b & c), CAISO still identified a need for 268 MW of additional fast-acting demand response to maintain reliability (CAISO 2014-15 Transmission Plan p. 149). The presence of a deficit, even with the inclusion of all of the remedial actions listed in a-c, demonstrates that any of these components alone would be unable to effectively mitigate the issues arising from the critical contingency.