

Southern California Edison
A.23-03-005 – Cal City PTC

DATA REQUEST SET E D - S C E - 0 0 2

To: Energy Division
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Job Title: Engineer 3
Received Date: 7/25/2023

Response Date: 9/26/2023

Question 12:

Planning Processes: Along with providing the 10-year planning period demand growth projections, including the model files used to support SCE’s forecasts of electrical demand, please also provide the Outage Contingency file(s) and any sensitivity and/or alternatives model files (presumed in PSLF format). This information may be used for the screening of alternatives relative to meeting the objectives identified for the Project.

Response to Question 12:

Response contains Confidential Information in Accordance with California Law and Regulations

Please find the following attachments included in this response:

- “CONFIDENTIAL A23-03-005_ED-SCE-002_Q12_Kramer Radial System_2023.sav”
- “CONFIDENTIAL A23-03-005_ED-SCE-002_Q12_Kramer Radial System_2023.drw”
- “CONFIDENTIAL A23-03-005_ED-SCE-002_Q12_Kramer Radial System_2028.sav”
- “CONFIDENTIAL A23-03-005_ED-SCE-002_Q12_Kramer Radial System_2028.drw”

These files represent the power flow models of SCE’s Kramer 115 kV System (radial portion) in 2023 (pre-Cal City Substation 115 kV Upgrade Project) and in 2028 (post-Cal City Substation 115 kV Upgrade Project). Two files, including the PSLF .sav and .drw files, are provided for each year. These files include the appropriate projected distribution substation loading values for use in subtransmission system modeling, reflecting projected 1-in-5 year heat storm values.¹ The 2023 files do not include Cal City Substation because it is not directly served by the 115 kV system. Cal City Substation is a 33/12 kV substation that is provided 33 kV source line power from both Edwards 115/33 kV Substation and from Randsburg 115/33 kV Substation. The 2028 files include the Cal City Substation, as being upgraded to 115 kV for its source power, and modeling of the two 115 kV sources lines. Lastly, regarding the other system alternatives considered, only the Cal City Substation 115 kV Upgrade Project required modeling in PSLF and therefore no other power flow modeling files were created.

Outage contingencies can be modeled by removing one subtransmission line from service at a time

¹ These values are different than projected values used in distribution substation planning, which uses 1-in-10 heat storm projections.

in the power flow models. For multi-terminal subtransmission lines (i.e., lines which connect to more than one substation), a contingency is represented by removing the entire line from service, including all segments that terminate at substations, and changing the rating parameter to “Rating 2” which reflects the emergency rating of the facilities.