

UCAN's 13th Set of Data Requests
A. 06-08-010

1. In this data request, UCAN seeks an analysis equivalent to that provided in SDG&E's response on 1/8/07 to UCAN data request 4-31. In that response, SDG&E used the GE PSLF powerflow model, the PSLF "contingency analysis screening tool," and "Powertech Lab's VSAT (Voltage Stability Analysis Tool)" to evaluate the capability of a post-Sunrise system to import 4200 Mw under normal conditions and 3500 Mw under G-1/N-1 conditions. Pursuant to CPUC policy regarding access to models, and SDG&E's stated willingness to run models for UCAN rather than providing the models themselves to UCAN, this data request asks SDG&E to use the GE PSLF model and Powertech Labs VSAT to evaluate the capability of a no-Sunrise system to import 3200 Mw under normal conditions and 2850 Mw under N-1/G-1 conditions. The specific UCAN cases for which an evaluation is sought are listed below.

In all cases, SDG&E should make all the same assumptions about new facilities, thermal limits, etc. as listed on pp. 3-5 of the 10/13/06 "SDG&E Import Capability Study Report for 2010" provided to UCAN on 1/8/07 in response to UCAN data request 4-31, except that the Imperial Valley-Central, Central-Sycamore Canyon, and Sycamore Canyon-Penasquitos transmission lines should be omitted. In all cases SDG&E should assume the same 90/10 peak loads shown in Table H-12 of SDG&E's 1/26/07 testimony for SDG&E Case 241 (AMI plus Sunrise).

In all cases, the evaluation methodology should be as described in section 5 of the 10/13/06 "SDG&E Import Capability Study Report for 2010" provided to UCAN on 1/8/07 in response to UCAN data request 4-31, including the analytical tools (section 5.2), the import boundary definition (section 5.3), the generation dispatch (section 5.4), and the study methodology (section 5.5). To the extent SDG&E is confident that imports of 3200 Mw under normal conditions and 2850 Mw under N-1/G-1 conditions for a particular case described below would not result in criteria violations (e.g., for post-transient stability), UCAN will accept a statement from SDG&E that it is confident no violation would have been found in lieu of SDG&E performing the actual analysis).

In all cases, the results should be presented in the same format as in Chapter 6 of the 10/13/06 "SDG&E Import Capability Study Report for 2010" provided to UCAN on 1/8/07 in response to UCAN data request 4-31. In addition, powerflow diagrams covering the same facilities as shown in

response to UCAN data request 9-19 should also be provided for each case listed below showing four situations analogous to those previously shown in SDG&E's response to UCAN data request 7-12: (i) flows and facility loading percentages under N-0 conditions with 3200 Mw of imports, including loop flow via Path 45, (ii) flows and facility loading percentages under N-1 conditions after "the outage of the Imperial Valley-Miguel 500 kV line," with imports still at 3200 Mw but SWPL out of service and the associated RAS triggered to trip the Imperial Valley-ROA line and the generation direct-connected to Imperial Valley substation, so that all imports flow from SCE, (iii) flows and facility loading percentages under N-1 conditions after the system has been "readjusted" so that imports are reduced to 2850 Mw, all from SCE, and (iv) flows and facility loading percentages under N-1-1 conditions after the subsequent outage of SCE's Barre-Ellis line.

The specific cases for which UCAN seeks an evaluation of an N-0 import capability of 3200 Mw and a G-1/N-1 import capability of 2850 Mw are:

a. With 2010 loads and generation resources as assumed for SDG&E Case 241, with either a third 500/230 KV transformer at Miguel or a RAS to trip one transformer after an outage of the other if imports over SWPL cannot be reduced to 1450 Mw pursuant to the current RAS for a Miguel 500/230 kV transformer outage. For this case, assume that the Path 44 emergency rating has been increased to 2850 Mw, but remains at 2200 Mw under normal conditions.

b. With 2010 loads and generation resources as assumed for SDG&E Case 241, with either a third 500/230 KV transformer at Miguel or a RAS to trip one transformer after an outage of the other if imports over SWPL cannot be reduced to 1450 Mw pursuant to the current RAS for a Miguel 500/230 kV transformer outage. For this case, assume that the Viejo-SONGS line has been looped into Talega, as previously modeled by SDG&E in response to UCAN data request 6-41, but that (unlike the situation in SDG&E's response to UCAN data request 6-41) flows over the south of SONGS lines comprising Path 44 remain limited to a maximum of 2500 Mw under N-1 conditions. Note that Path 44 is defined to mean the lines from SONGS to SDG&E, and does not include the Viejo-Talega line, consistent with SDG&E's answers to UCAN data requests 6-41, 9-19, and 10-29a.

2. SDG&E's 10/13/06 "SDG&E Import Capability Study Report for 2010" is labeled as a draft. Please provide any subsequent drafts or final version of this report, if one exists.

3. SDG&E's 10/13/06 "SDG&E Import Capability Study Report for 2010" does not appear to address import capability in subsequent years. Please provide the following:

a. Any analysis by SDG&E of the import capability into the SDG&E system in any year after 2010.

b. For that same year, please provide the same analysis requested by UCAN in question 1.a., above, only using the loads and generation resources from SDG&E's Case 241 for that year.

c. For that same year, please provide the same analysis requested by UCAN in question 1.b., above, only using the loads and generation resources from SDG&E's Case 241 for that year.

4. Please provide, for each of the existing 500/230 kV transformers at Miguel, a listing of the time and duration of each outage of that transformer from 1/1/96 to the present, indicating for each outage whether it was forced or scheduled.