CHAPTER 25
Prepared Rebuttal Testimony
Of
PATRICK LEE
SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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I. Introduction and Summary

The purpose of my rebuttal testimony is to address several assertions made by the Utility Consumers’ Action Network (UCAN) in August 16, 2006 testimony. In summary, SDG&E’s AMI solution is sound, well thought out and will benefit the Electric Transmission and Distribution (T&D) system.

II. UCAN has drawn inaccurate conclusions regarding the T&D benefits derived from SDG&E’s AMI solution

It is clear from his testimony that UCAN witness William Marcus is unaware that SDG&E’s AMI proposal already includes outage detection, and considers both demand response impacts and future Smart Grid development and deployment. Specific examples of his basic lack of understanding follow. The page references are to Mr. Marcus prepared direct testimony.

A. UCAN witness William Marcus states (on page 16) that “One of the reasons that PG&E showed higher benefits than SDG&E is that almost 9% of PG&E’s benefits came from improvements in electric outage detection and restoration…..SDG&E does not plan to build these capabilities into its AMI system.”

Mr. Marcus is incorrect. SDG&E does plan to include outage detection in the AMI solution (as thoroughly discussed in Chapter 4 of SDG&E’s AMI testimony at PTL-3, Section 2 “Outage Management Benefits”). AMI will provide critical end point data which will allow SDG&E to verify which customers are out of service, and which customers have been restored, plus
other valuable data. SDG&E’s outage analysis and follow-up benefits are
outlined in the AMI T&D work papers.

B. UCAN witness William Marcus states (on page 25) that
“SDG&E should be required to analyze ‘smart grid’
communication to improve outage restoration and provide
more information on transmission and distribution
operations.”

SDG&E’s AMI proposal supports Smart Grid implementation by
providing critical end point data. Although “Smart Grid” communications can
provide other benefits, such benefits are not necessary for the deployment of
AMI. SDG&E’s current proposal of AMI technologies does not preclude
SDG&E from leveraging smart grid communications when such
communication channels or systems become available. SDG&E will
prudently and diligently conduct a business case analysis to determine
whether portions of the AMI communications can use smart grid
communications. Regardless of the communications delivery systems, AMI
will provide end-point customer data to integrated electric transmission and
distribution control centers.

C. UCAN’s Witness William Marcus states (on page 104) that
“residential requirements do not exhibit a peak in the middle
of the day, as does the nonresidential class”.

Although this statement is generally correct for mild weather days,
SDG&E’s most recent system peak was primarily driven by residential AC
load and occurred during the middle of the day. The high heat and humidity
on Saturday, July 22nd drove the recent SDG&E system record peak demand
to 4,502 MW at about 2:30 PM. This peak was 400+ MW greater than our
previous week day peak and was primarily driven by residential air
conditioning load. In comparing this July peak day with a typical day in May,
SDG&E’s Dynamic Load Profiles for its residential class below showed that
an increase in residential load of 1,274 MW at 2:30 PM can occur on peak day conditions.

D. UCAN’s Witness William Marcus states (on page 107) that any peak load shifting as a result of CPP or PTR program could exaggerate the residential peak and aggravate loading on the distribution system

SDG&E’s circuits and substations have a combination of both residential and non-residential customers spread across a mix of climate zones. As indicated in the chart below, most of SDG&E’s circuits, including a majority of residential circuits, peaked during the middle of the day under the severe weather conditions experienced on July 22nd, 2006 discussed above. SDG&E plans its distribution circuit capacity based on the projected peak demand from historical records and estimated load addition. The low number of
circuits that peak before 11 am and after 7 pm are already factored into SDG&E’s circuit capacity planning process. In addition, the magnitude of projected peak shifting outside of the system peak window is very small when spread across many distribution circuits. Therefore, peak load shifting will not require T&D additions.

This concludes my prepared rebuttal testimony.