

March 1, 2007

Mr. Steve Larson, Executive Director
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

Subject: Reporting Standards: System SAIDI, SAIFI, and MAIFI Report
Decision 96-09-045

Dear Mr. Larson:

Attached is Southern California Edison's (SCE) annual report on system reliability, as required by Section 5 "Reporting Standards" of Appendix A of D.96-09-045. The report summarizes historical data for the System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), and Momentary Average Interruption Frequency Index (MAIFI).

As stated in the March 1, 2006 cover letter for SCE's 2005 annual report on system reliability, SCE has implemented a new outage data recording system to allow direct calculation of reliability metrics. The new system improves the accuracy of reliability measurement during the period when an affected circuit or part thereof is being returned to service. In particular, it allows the duration of and number of customers restored at each restoration step of the outage to be individually recorded and summed, instead of estimating outage duration based on when the first segment is returned to service using the "92% / 8%" method it had employed since the issuance of D96-09-045. This modification is part of the settlement in the 2003 SCE GRC (D.04-07-022) that became the Employee Safety and Distribution Reliability Performance Incentive Mechanism (SRPIM). In 2004, SCE began implementing a new system called the Outage Database and Reliability Metrics (ODRM) which phased-in two major changes from SCE's traditional methodology:

- A. Beginning 2005, for complete circuit interruptions and a limited number of partial circuit interruptions, the times and customers affected at the start of the outage and every subsequent restoration step were recorded, and
- B. Beginning 2006, all distribution outages including all partial circuit interruptions were recorded.

Attachment 1 provides calculations of SCE's reliability over the past ten years with a) all interruptions included and b) major events excluded, as required by D.96-09-045. For years 1997-2004, data in Attachment 1 were derived using traditional methods (92/8) and assumptions as described above. For 2005, data were derived consistent with (A) above; and for 2006, data were derived consistent with (B) above.

Attachment 2 provides circuit identification and number of customer on those circuits experiencing more than twelve sustained interruptions after exclusion of major events. Attachment 3 identifies the 10 largest outage events (in terms of SAIDI) each year 1997-2006, whether any of them were excluded from the reported indices, the total number of customers affected, the longest customer interruption, and the number of employees used to restore service. Attachment 4 identifies, for each excludable event listed, the number of customers without service by hourly interval. Attachment 5 identifies, for excludable outage event, number of customers without service by outage duration.

In 2006, SCE made two adjustments to the recorded reliability performance data because more than 10 percent of SCE's customers were affected as a result of severe weather. First, SCE removed interruptions that occurred on January 2, 2006, during a major event when more than 10% of our customers were affected as a result of a severe winter rain storm; and second, SCE removed interruptions that occurred on July 22, 2006, during a major event when more than 10% of our customers were affected as a result of a severe summer heat storm. In these events, 720,000 customers and 528,000 customers, respectively, were affected (see Attachment 5 for specific outage duration information).

Should you have any questions regarding this matter, please contact me or Alfred Escamilla at (626) 302-1941.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert K. ...". The signature is fluid and cursive, with a large initial "R" and a long, sweeping tail.

Attachments

cc: Mr. Kevin P. Coughlan, Chief IMC Branch, Energy
Mr. Richard Clark, Consumer Protection & Safety Division

Southern California Edison
Annual System Reliability Report - 2006
March 1, 2007
Table of Contents

| Attachment | Tab Name | Description |
|------------|-------------------------------|--|
| 1 | Historical System Indices | SAIDI, SAIFI, and MAIFI Annual System Statistics with and without major events using DTOM (1997-2005) and ODRM (2005-2006) |
| 2 | List > 12 Sustained | Circuit ID and number of customer experiencing more than one 5 (or more) minute outage (i.e., sustained) per month on a rolling annual average basis after exclusion of major events (1997-2006) |
| 3 | Top 10 SAIDI Each Year | Top 10 annual outage events, the number of customers affected, and number of people used to restore service (1997-2006) |
| 4 | No Service by Hourly Interval | For each significant event, number of customers without service by hourly interval (1997-2006) |
| 5 | No Service by Duration | For significant outage events, number of customers without service by outage duration (1997-2006) |

cc:

A. Escamilla
J. A. Kelly
R. J. Lee
J. T. Ly
F. A. McNulty
J. W. McNabb
G. A. Perrault
C. H. Silsbee
L. B. Tonsick