

September 19, 2011

California Energy Commission
Docket Office, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512
docket@energy.state.ca.us

DOCKET	
11-IEP-1C	
DATE	Sept 19 2011
RECD.	Sept 19 2011

Re: California Energy Commission Docket No. 11-IEP-1C Staff Report – A Review
of Transmission Losses in Planning Studies

To Whom It May Concern:

The California Energy Commission (Energy Commission) staff in its August 2011 paper entitled “A Review of Transmission Losses in Planning Studies,” solicits comments on what transmission and distribution loss factor sources and data should be used in the future. The report proposes three steps to improve consistency of the transmission and distribution loss values used by the Energy Commission, California Public Utilities Commission (CPUC), and Air Resources Board (ARB). These steps are: 1) utilities use common data/loss studies to provide consistent loss factors to the Energy Commission and CPUC; 2) consistency in loss assumptions are used within analyses; and, 3) the Energy Commission demand forms and instructions are revised to require utilities to provide separate loss estimates for imports.¹ Based on staff’s review, staff proposes these steps on the basis that “[t]he source of some of these values appears to be data that has not been updated in quite some time.”² In response to the report, SCE submits the following comments.

- Staff correctly finds that, “Loss factors vary across utilities because their infrastructure differs.”³ Therefore the use of statewide factors should be avoided. The use of statewide factors applied to unique utility systems will result in inaccurate estimates that: 1) affect program costs and 2) lead to over or under procurement of supply—the results that the staff report seeks to avoid.⁴
- Re-estimation of transmission and distribution losses is unnecessary given the general lack of variation annually from 2002 to 2008, as illustrated in the staff report.⁵ SCE’s 2009 and 2012 General Rate Cases (GRC), which were based on

¹ California Energy Commission Staff Paper, “A Review of Transmission Losses in Planning Studies,” August 2011, p. 39.

² Ibid.

³ Ibid, p. 18.

⁴ Ibid, p. 5.

⁵ Ibid., Fig. ES-1: California Statewide Average Historical Transmission and Distribution Losses p. 3.

2006 and 2009 data respectively, confirms this general lack of variation over the time horizon considered in staff's analysis (see Tables 1 & 2). Furthermore, SCE's review of loss factors used in various proceedings (as listed in the staff report) has identified a source of the reported variances as related to data vintage associated with SCE values. Loss data for SCE, reported in the Integrated Energy Policy Report (IEPR) proceeding, is estimated on an annual basis while the losses reported in the GRC are updated every three years.

- SCE recommends that the Energy Commission work with the California Independent System Operator Corporation (CAISO) to assess the needs for loss studies in the future. Since the electric industry restructuring in 1998, transmission and distribution losses have been allocated in real time by the CAISO and losses on the transmission system have been allocated to generators/producers as appropriate. We believe they would be most knowledgeable to provide recommendations on future data collection and management.

Table 1 SCE's GRC Time of Use Loss Factors – Energy

Time-Of-Use Line Loss Factors											
Energy											
Season	TOU Period	Number of Hours		Transmission Loss Factor		Sub-Transmission Loss Factor		Primary Loss Factor		Secondary Loss Factor	
		2006	2009	2006	2009	2006	2009	2006	2009	2006	2009
Annual	All	8760	8760	1.01707	1.01691	1.02738	1.02718	1.05667	1.05612	1.08055	1.07993
Annual	On-Peak	498	522	1.01885	1.01865	1.03065	1.03031	1.06664	1.06564	1.09029	1.08935
Annual	Mid-Peak	2957	2954	1.01754	1.01741	1.02841	1.02820	1.05951	1.05896	1.08297	1.08238
Annual	Off-Peak	5305	5284	1.01643	1.01627	1.02638	1.02615	1.05342	1.05286	1.07719	1.07655
Summer	All	2856	2928	1.01777	1.01750	1.02855	1.02817	1.06023	1.05912	1.0844	1.08327
Summer	On-Peak	498	522	1.01885	1.01865	1.03065	1.03031	1.06664	1.06564	1.09029	1.08935
Summer	Mid-Peak	747	783	1.01816	1.01790	1.02946	1.02904	1.06282	1.06155	1.08641	1.08514
Summer	Off-Peak	1611	1623	1.01701	1.01671	1.02733	1.02688	1.05624	1.05497	1.08042	1.07905
Winter	All	5904	5832	1.01666	1.01655	1.02678	1.02663	1.05471	1.05444	1.07817	1.07788
Winter	Mid-Peak	2210	2171	1.0173	1.01720	1.02804	1.02786	1.05829	1.05795	1.08156	1.08122
Winter	Off-Peak	3694	3661	1.01613	1.01604	1.02594	1.02579	1.05202	1.05184	1.07547	1.07526

Table 2 – SCE's GRC Time of Use Line Loss Factors – Demand

Time-Of-Use Loss Factors											
Demand											
Season	TOU Period	Number of Hours		Transmission Loss Factor		Sub-Transmission Loss Factor		Primary Loss Factor		Secondary Loss Factor	
		2006	2009	2006	2009	2006	2009	2006	2009	2006	2009
Annual	All	8760	8760	1.02004	1.02009	1.03282	1.03290	1.07445	1.07410	1.09788	1.09753
Annual	On-Peak	498	522	1.02004	1.02009	1.03282	1.03290	1.07445	1.07410	1.09788	1.09753
Annual	Mid-Peak	2957	2954	1.01988	1.01961	1.03253	1.03208	1.07345	1.07139	1.09687	1.09478
Annual	Off-Peak	5305	5284	1.01986	1.01961	1.03252	1.03207	1.07310	1.07137	1.09651	1.09476
Summer	All	2856	2928	1.02004	1.02009	1.03282	1.03290	1.07445	1.07410	1.09788	1.09753
Summer	On-Peak	498	522	1.02004	1.02009	1.03282	1.03290	1.07445	1.07410	1.09788	1.09753
Summer	Mid-Peak	747	783	1.01988	1.01961	1.03253	1.03208	1.07345	1.07139	1.09687	1.09478
Summer	Off-Peak	1611	1623	1.01986	1.01961	1.03252	1.03207	1.07310	1.07137	1.09651	1.09476
Winter	All	5904	5832	1.01880	1.01895	1.03067	1.03091	1.06669	1.06752	1.09000	1.09084
Winter	Mid-Peak	2210	2171	1.01880	1.01895	1.03067	1.03091	1.06654	1.06752	1.08985	1.09084
Winter	Off-Peak	3694	3661	1.01878	1.01817	1.03063	1.02955	1.06669	1.06320	1.09000	1.08645

As always, SCE appreciates the opportunity to submit its comments. Feel free to contact me regarding any questions or concerns.

Sincerely,

/s/ Manuel Alvarez

Manuel Alvarez, Manager
Regulatory Policy and Affairs
Southern California Edison Company
1201 K Street, Ste. 735
Sacramento, California 95814
(916) 441-2369