

CFL METERING STUDY

FINAL REPORT

Volume 2, Load Shape Data

Prepared for

**Pacific Gas & Electric Company
San Francisco, California**

**San Diego Gas & Electric Company
San Diego, California**

**Southern California Edison Company
Rosemead, California**

Prepared by

**KEMA Inc.
Oakland, California**

March 18, 2005

SECTION 1 LOAD SHAPE DATA1-1

LIST OF TABLES

Table 1-1	Indoor CFL Load Shapes by Day Type	1-1
Table 1-2	Indoor CFL Load Shapes by Season and Day Type	1-2
Table 1-3	Indoor CFL Load Shapes by Utility.....	1-2

This document is the second volume of the CFL Metering Study, prepared for the California investor-owned utilities. The purpose of this document is to provide the data underlying the load shape figures in Section 4 of the main report.

The series of tables that follows provides CFL load profile data over a 24-hour period. Table 1-1 presents the data for indoor CFL load shapes, showing the average percentage that fixtures with CFLs are used for each hour of the day, averaged across the entire year. The first column denotes the hour of the day, where 1 = 12 Midnight to 1:00 AM and 24 = 11:00 PM to 12 Midnight. CFL usage peaks between 8:00 and 9:00 PM. The time period associated with the lowest usage of CFLs is between 3:00 and 4:00 AM.

Table 1-1
Indoor CFL Load Shapes by Day Type

Hour	Weekday	Weekend	All Days
1	6%	8%	7%
2	4%	5%	5%
3	3%	4%	4%
4	3%	4%	3%
5	4%	3%	3%
6	5%	4%	5%
7	7%	5%	6%
8	7%	7%	7%
9	8%	8%	8%
10	8%	9%	9%
11	8%	10%	9%
12	9%	10%	9%
13	8%	10%	9%
14	9%	10%	9%
15	9%	11%	10%
16	9%	10%	9%
17	9%	10%	9%
18	10%	11%	10%
19	13%	14%	13%
20	19%	19%	19%
21	23%	23%	23%
22	21%	21%	21%
23	17%	17%	17%
24	11%	12%	11%

Table 1-2 provides data for indoor CFL load shapes by season and day type. For this table, winter refers to the month with the highest usage, which is December, and summer to the lowest usage month, which is June.

Table 1-2
Indoor CFL Load Shapes by Season and Day Type

Hour	Winter (December)		Summer (June)	
	Weekday	Weekend	Weekday	Weekend
1	7%	8%	5%	6%
2	4%	5%	3%	4%
3	3%	4%	3%	3%
4	3%	4%	3%	3%
5	4%	3%	3%	2%
6	5%	4%	4%	3%
7	7%	6%	6%	4%
8	8%	7%	6%	6%
9	8%	9%	6%	7%
10	9%	11%	7%	8%
11	10%	12%	7%	9%
12	10%	13%	7%	8%
13	10%	12%	7%	8%
14	10%	12%	7%	8%
15	10%	12%	7%	8%
16	10%	12%	7%	8%
17	10%	12%	8%	8%
18	11%	13%	8%	9%
19	16%	17%	10%	10%
20	22%	22%	14%	13%
21	25%	25%	19%	18%
22	23%	23%	19%	17%
23	17%	19%	14%	13%
24	11%	13%	9%	9%

Table 1-3 provides data for CFL load shapes by utility service territory.

Table 1-3
Indoor CFL Load Shapes by Utility

Hour	SDG&E	PG&E	SCE
1	7%	5%	7%
2	4%	3%	5%
3	2%	2%	4%
4	2%	3%	4%
5	2%	3%	4%
6	4%	4%	4%
7	6%	6%	6%
8	7%	7%	6%
9	9%	8%	6%
10	10%	9%	8%
11	12%	10%	8%
12	12%	10%	8%
13	11%	9%	8%
14	13%	9%	7%
15	13%	9%	8%
16	12%	9%	8%
17	11%	10%	7%
18	11%	11%	6%
19	16%	14%	10%
20	26%	18%	17%
21	28%	22%	21%
22	25%	20%	20%
23	18%	15%	16%
24	12%	9%	11%