

March 1, 2010

Paul Clanon, Executive Director
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

Subject: Reporting Standards, System SAIDI, SAIFI, and MAIFI Report
Decision No. D.96-09-045

Dear Mr. Clanon:

Pursuant to Appendix A of D.96-09-045, attached is Southern California Edison's 2009 Annual System Reliability Report.

Attachment 1A provides values of SAIDI, SAIFI, and MAIFI, with and without excludable events, for years 2000 through 2009. There were no days in 2009 excludable under the definitions of D.96-09-045.

As you may be aware, many utilities across the U.S. are calculating their system reliability metrics using a methodology consistent with the guidelines provided in IEEE Standard 1366-2003, "IEEE Guide for Electric Power Distribution Reliability Indices." Many believe use of this standard offers advantages of 1) providing consistency and comparability across different utilities, and 2) clarity and objectivity in the determination of what events are excludable.

Per earlier discussions with members of the CPUC's Energy Division, SCE is submitting, as Attachment 1B, a ten-year summary of reliability metrics calculated per the guidelines of IEEE 1366 in addition to the ten-year summary described in D.96-09-045.

Most of the differences between reliability metrics calculated per D.96-09-045 and IEEE 1366 are due to the number of days considered to be excludable. To facilitate transparency of the IEEE 1366 method we have provided, as Attachment 1C, a detailed comparison of the days excludable under D.96-09-045 and days excludable under IEEE 1366.

Attachments 2-5 provide additional data on significant events as required by D.96-09-045.

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

Best regards,



Janine M. Watkins-Ivie

Enclosures

CC: Julie Fitch, Energy Division director
Richard Clark, Consumer Protection & Safety Division Director
Brian Schumacher, Energy Division

Southern California Edison
 Annual System Reliability Report - 2009
 March 1, 2010
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Attachment	Tab Name	Description
1A	Historical System Indices	SAIDI, SAIFI, and MAIFI Annual System Statistics with and without major events using DTOM (2000-2005) and ODRM (2005-2009) calculated per D.96-09-045.
1B	IEEE Std 1366-2003 Historical System Indices	SAIDI, SAIFI, and MAIFI Annual System Statistics with and without major events using DTOM (2000-2005) and ODRM (2006-2009) calculated per IEEE-1366.
1C	Excluded Days Detail	For each excluded day, the date & primary cause listed with excluded SAIDI, SAIFI, MAIFI and the basis for the exclusion (either the D96-09045 definition or IEEE Std 1366-2003 2.5Beta Method).
2	List > 12 Sustained	Circuit ID and number of customers experiencing more than one sustained outage per month on a rolling annual average basis after exclusion of major events (2000-2009)
3	Top 10 SAIDI Each Year	Top 10 annual outage events, the number of customers affected, and number of people used to restore service (2000-2009)
4	No Service by Hourly Interval	For each major event, number of customers without service by hourly interval (2000-2009)
5	No Service by Duration	For each major event, number of customers without service by outage duration (2000-2009)

Southern California Edison
Historical System Reliability Data
2000 - 2004 DTOM
2005 DTOM & ODRM
2006 - 2009 ODRM

YEAR	All Interruptions Included ¹			Major Events Excluded ²		
	SAIDI ³	SAIFI	MAIFI	SAIDI ³	SAIFI	MAIFI
2000	47.09	1.14	1.18	47.09	1.14	1.18
2001	51.69	1.05	1.13	51.69	1.05	1.13
2002	52.75	1.23	1.11	50.44	1.11	1.10
2003 (w/o sub) ⁵	87.23	1.39	1.37	63.90	1.19	1.17
2003 (w/ sub)	79.20	1.35	1.37	57.78	1.15	1.18
2004 (w/o sub)	75.21	1.34	1.19	67.11	1.26	1.12
2004 (w/ sub)	68.39	1.30	1.19	62.83	1.24	1.13
2005 (w/o sub)	91.64	1.52	1.44	74.25	1.27	1.21
2005 (w/ sub)	91.45	1.52	1.44	74.16	1.27	1.21
2005 (ODRM) ⁴	106.41	1.02	2.00	82.10	0.82	1.67
2006 ODRM	142.27	1.08	1.81	116.34	1.00	1.64
2007 ODRM	151.60	1.15	1.68	141.95	1.11	1.60
2008 ODRM	119.21	1.12	1.67	119.21	1.12	1.67
2009 ODRM	105.98	0.94	1.41	105.98	0.94	1.41

All calculations utilize a definition of "sustained" interruption as described in D.96-09-045, which is an interruption lasting 5 minutes or longer.

¹ This excludes ISO-directed firm load curtailment, Protective Outage Plan (POP) outages, Remedial Action Scheme (RAS) outages.

² Major Event Exclusions are defined in D.96-09-045 under Appendix A Section I - Item 4c.

³ Metrics for 2000 - 2005 have been adjusted upward to reflect the variance introduced by Southern California Edison's former convention of declaring All Load Up (ALU) when power had been restored up to the last residential transformer. An estimate was added to the annual CML base to arrive at the normalized SAIDIs. No adjustment was necessary beyond 2005.

⁴ ODRM data in 2005 only does not include Area Outages.

Southern California Edison

Historical System Reliability Data (IEEE Std 1366-2003 2.5 Beta Method)

2000 - 2005 DTOM

2006 - 2009 ODRM

YEAR	All Interruptions Included			Major Events Excluded		
	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
2000	46.59	1.12	1.23	46.59	1.12	1.23
2001	60.00	1.19	1.16	45.71	0.97	1.08
2002	52.29	1.27	1.15	44.95	1.05	1.09
2003	89.26	1.39	1.43	53.37	1.11	1.15
2004	74.93	1.34	1.21	55.30	1.15	1.05
2005	92.26	1.53	1.47	72.57	1.33	1.23
2006	142.14	1.05	1.85	96.59	0.89	1.52
2007	151.32	1.10	1.74	85.34	0.88	1.37
2008	118.91	1.06	1.73	99.35	0.95	1.56
2009	105.80	0.90	1.45	88.77	0.83	1.31

All calculations utilize a definition of "sustained" interruption as described in IEEE Std 1366, 2003 Edition, which is an interruption lasting longer than 5 minutes.

In years 2006 - 2009, values of SAIDI, SAIFI, and MAIFI were calculated per the guidance of IEEE 1366 with the exception of using five years of historical data in applying the "2.5 beta method" to determine excludable days. Per IEEE 1366, days are excluded from a given year's metric if their SAIDI exceeds 2.5 times the standard deviation of daily SAIDI over the previous five year period. However, because complete ODRM data did not exist prior to 2006, determination of the standard deviation over a five-year period will not be possible until 2011. Therefore, excludable days for years 2006 and 2007 were both determined based on daily SAIDI data in year 2006. Excludable days for 2008 were determined based on daily SAIDI data in years 2006 and 2007. Excludable days for 2009 were determined based on daily SAIDI data in years 2006-2008. This interim approach is consistent with IEEE 1366.

Excluded Days Detail

Attachment 1C

No.	YEAR	DATE	CAUSE	Excluded under IEEE 2.5Beta				Excluded under D:96-09-045				Source of data
				SAIDI	SAIFI	MAIFI		SAIDI	SAIFI	MAIFI		
1	2001	1/1/2001	Rain/Wind Storm	Y	1.73	0.03	0.03	0.03				DTOM
2	2001	2/13/2001	Rain/Snow/Wind Storm	Y	3.11	0.03	0.03	0.03				DTOM
3	2001	3/19/2001	ISO-Directed Rotating Blackouts	Y	6.08	0.10	0.00	0.00				DTOM
4	2001	5/8/2001	ISO-Directed Rotating Blackouts	Y	1.71	0.03	0.00	0.00				DTOM
5	2001	11/24/2001	Rain/Wind Storm	Y	1.67	0.02	0.02	0.02				DTOM
Total				5	14.29	0.22	0.08	0.08	0	0.00	0.00	0.00

1	2002	6/26/2002	Louisiana Fire	Y	2.15	0.15	0.00	0.00	Y	2.15	0.15	0.00	DTOM
2	2002	6/27/2002	Louisiana Fire						Y	0.05	0.00	0.00	DTOM
3	2002	6/28/2002	Louisiana Fire						Y	0.11	0.00	0.00	DTOM
4	2002	11/8/2002	Rain/Wind Storm	Y	2.42	0.04	0.03	0.03					DTOM
5	2002	12/16/2002	Rain/Wind Storm	Y	2.78	0.03	0.02	0.02					DTOM
Total				3	7.34	0.22	0.06	0.06	3	2.31	0.15	0.01	

1	2003	1/5/2003	Santa Ana Wind Storm	Y	2.44	0.01	0.03	0.03					DTOM
2	2003	1/6/2003	Santa Ana Wind Storm	Y	14.95	0.09	0.11	0.11	Y	14.95	0.09	0.11	DTOM
3	2003	1/7/2003	Santa Ana Wind Storm	Y	1.86	0.02	0.03	0.03	Y	1.86	0.02	0.03	DTOM
4	2003	1/8/2003	Santa Ana Wind Storm						Y	0.40	0.01	0.01	DTOM
5	2003	2/25/2003	Rain Storm	Y	2.30	0.02	0.01	0.01					DTOM
6	2003	10/24/2003	Southern California Wild Fires						Y	0.16	0.01	0.03	DTOM
7	2003	10/25/2003	Southern California Wild Fires						Y	1.13	0.01	0.01	DTOM
8	2003	10/26/2003	Southern California Wild Fires	Y	5.98	0.06	0.02	0.02	Y	5.98	0.06	0.02	DTOM
9	2003	10/28/2003	Southern California Wild Fires	Y	1.87	0.00	0.00	0.00					DTOM
10	2003	11/12/2003	Lightning Storm	Y	3.02	0.03	0.03	0.03					DTOM
11	2003	12/25/2003	Rain Storm & Mud Slides	Y	3.47	0.04	0.04	0.04					DTOM
Total				8	35.88	0.28	0.28	0.28	6	24.48	0.20	0.21	

Excluded Days Detail

Attachment 1C

No.	YEAR	DATE	CAUSE	Excluded under IEEE 2.5Beta			Excluded under D.96-09-045			Source of data	
				SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI		
1	2004	8/12/2004	Lightning Storm	1.57	0.00	0.01				DTOM	
2	2004	9/11/2004	Moorpark A-Bank Transformer Failure	1.62	0.03	0.01				DTOM	
3	2004	10/17/2004	Rain Storm	1.99	0.02	0.03				DTOM	
4	2004	10/20/2004	Rain Storm	1.61	0.03	0.02				DTOM	
5	2004	10/27/2004	Wind Storm	2.39	0.02	0.02				DTOM	
6	2004	11/21/2004	Wind Storm	2.57	0.02	0.02				DTOM	
7	2004	12/28/2004	Winter Rain Storm	2.71	0.03	0.05	Y	2.71	0.03	0.05	DTOM
8	2004	12/29/2004	Winter Rain Storm	3.55	0.03	0.01	Y	3.55	0.03	0.01	DTOM
9	2004	12/30/2004	Winter Rain Storm				Y	0.22	0.00	0.00	DTOM
10	2004	12/31/2004	Winter Rain Storm	1.62	0.01	0.00	Y	1.62	0.01	0.00	DTOM
Total				19.63	0.19	0.16	4	8.10	0.08	0.07	

1	2005	1/9/2005	Winter Rain Storm	1.49	0.02	0.01					DTOM
2	2005	1/10/2005	Winter Rain Storm	1.48	0.03	0.01	Y	1.48	0.03	0.01	DTOM
3	2005	1/11/2005	Winter Rain Storm	1.57	0.02	0.01	Y	1.57	0.02	0.01	DTOM
4	2005	1/12/2005	Winter Rain Storm				Y	0.36	0.01	0.00	DTOM
5	2005	2/19/2005	Winter Rain Storm	2.26	0.03	0.02					DTOM
6	2005	7/24/2005	Lightning Storm	1.50	0.01	0.02					DTOM
7	2005	8/6/2005	Wind Storm	1.68	0.01	0.02					DTOM
8	2005	9/3/2005	Brush Fire	2.12	0.01	0.00					DTOM
9	2005	9/20/2005	Lightning Storm	3.89	0.04	0.09	Y	3.89	0.04	0.09	DTOM
10	2005	10/17/2005	Lightning Storm	3.69	0.04	0.04					DTOM
Total				19.69	0.21	0.24	4	7.30	0.10	0.12	

1	2006	1/2/2006	Wind storm & Rain storm	10.48	0.05	0.10	Y	10.48	0.05	0.10	ODRM
2	2006	7/15/2006	Heat Storm	2.49	0.02	0.02					ODRM
3	2006	7/20/2006	Heat Storm	2.30	0.01	0.03					ODRM
4	2006	7/22/2006	Heat Storm	15.44	0.04	0.07	Y	15.44	0.04	0.07	ODRM
5	2006	7/23/2006	Heat Storm	4.87	0.01	0.02					ODRM
6	2006	7/24/2006	Heat Storm	2.82	0.01	0.01					ODRM
7	2006	12/27/2006	Wind storm, Others	4.05	0.02	0.04	Y				ODRM
8	2006	12/28/2006	Wind storm, Others	3.09	0.01	0.02	Y				ODRM
Total				45.55	0.16	0.33	2	25.92	0.08	0.18	

Excluded Days Detail

Attachment 1C

No.	YEAR	DATE	CAUSE	Excluded under IEEE 2.5Beta			Excluded under D.96-09-045			Source of data
				SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	
1	2007	1/5/2007	Wind storm & Rain storm	2.17	0.02	0.04			ODRM	
2	2007	3/27/2007	Wind storm & Rain storm	5.71	0.03	0.04			ODRM	
3	2007	4/12/2007	Wind storm, Others	2.21	0.02	0.04			ODRM	
4	2007	8/31/2007	Lightning storm & Heat storm	3.28	0.02	0.03			ODRM	
5	2007	9/1/2007	Lightning storm & Heat storm	3.40	0.01	0.03			ODRM	
6	2007	9/2/2007	Lightning storm & Heat storm	6.13	0.02	0.02			ODRM	
7	2007	9/3/2007	Lightning storm & Heat storm	10.33	0.03	0.02			ODRM	
8	2007	9/4/2007	Lightning storm & Heat storm	2.33	0.01	0.01			ODRM	
9	2007	10/21/2007	Wind Storm, Wild Fires & 10% Major Event (higher customers interrupted on momentary with low duration)	9.61	0.04	0.09	Y		ODRM	
10	2007	10/22/2007	Wind Storm, Wild Fires, (less customers interrupted with high duration) i.e. Snow Valley 12KV, Taggett 12KV, Oak Knoll were de-energized requested by Fire Dept.	18.31	0.04	0.03			ODRM	
11	2007	12/25/2007	Wind storm	2.49	0.01	0.02			ODRM	
Total				65.98	0.23	0.36	1	9.61	0.04	0.09
1	2008	1/4/2008	Rain storm & Wind storm	3.00	0.02	0.03			ODRM	
2	2008	1/5/2008	Rain storm & Wind storm	2.10	0.01	0.01			ODRM	
3	2008	1/24/2008	Rain storm & Wind storm	3.63	0.01	0.01			ODRM	
4	2008	2/3/2008	Rain storm & Wind storm	2.63	0.02	0.06			ODRM	
5	2008	7/2/2008	Wild Fires	3.30	0.02	0.02			ODRM	
6	2008	12/15/2008	Rain storm & Wind storm	2.18	0.01	0.02			ODRM	
7	2008	12/17/2008	Rain storm & Wind storm	2.72	0.01	0.02			ODRM	
Total				19.57	0.10	0.18	0	0.00	0.00	0.00
1	2009	6/3/2009	Lightning Storm	3.85	0.02	0.05			ODRM	
2	2009	8/27/2009	Wild Fires	2.93	0.00	0.01			ODRM	
3	2009	8/29/2009	Wild Fires	1.98	0.00	0.00			ODRM	
4	2009	8/31/2009	Wild Fires	3.84	0.00	0.00			ODRM	
5	2009	10/27/2009	Wind Storm	1.99	0.01	0.03			ODRM	
6	2009	12/7/2009	Rain/Wind Storm	2.43	0.02	0.03			ODRM	
Total				17.03	0.07	0.13	0	0.00	0.00	0.00

**Southern California Edison
Historical System Reliability Data
2000 - 2009**

Customers experiencing > 12 sustained outages

Year	Circuit	Circuit Name	Number of customers experiencing > 12 sustained outages
2000	5085	DINKEY CREEK	37
2000	8702	HOSSACK	100
2000	10945	MAHOGANY	6
2000	12910	NOVAC	266
2000	13959	PERIMETER	7
2000	17672	TERMINUS	137
2001	390	ALPINE	136
2001	1626	BIGFOOT	47
2001	2664	CALCADI	5
2001	3890	CONCEPCION	84
2001	5018	DEVINE	8
2001	5146	DOGWOOD	2,116
2001	12722	NIPTON	27
2001	15680	SALT CREEK	118
2001	19134	WEINING	64
2002	1630	BIG ROCK	469
2002	4635	DANBY	57
2002	9060	IVERSON	124
2002	14814	REDSTONE	1,246
2003	2290	BROOKINGS*	1
2003	2370	BUDD	287
2003	2881	CAPANERO	292
2003	3240	CEDAR GLEN*	440
2003	5850	ELSTER	132
2003	8410	HIGH SCHOOL*	341
2003	8670	HOOK CREEK*	550
2003	9320	JORDAN	665
2003	9549	KELLPEAK*	10
2003	11448	MCCLENNY	55
2003	12190	MORITZ*	1,345
2003	12860	NORTH SHORE*	528
2003	14349	POSO PARK	49
2003	14690	RANGER*	730
2003	15922	SAUNDERS*	733
2003	16049	SEALS	93
2003	16839	SQUINT*	777
2003	17190	SUGARLOAF	131
2003	17997	TORONTO*	53

Attachment 2

Year	Circuit	Circuit Name	Number of customers experiencing > 12 sustained outages
2004	390	ALPINE*	302
2004	1630	BIG ROCK	534
2004	3387	CHAWA	894
2004	5085	DINKEY CREEK	85
2004	6432	FINGAL	189
2004	8670	HOOK CREEK*	297
2004	8930	INTAKE	13
2004	9060	IVERSON	125
2004	9194	JEEP*	1,079
2004	9205	JENKS LAKE*	121
2004	9290	JOHNSONDALE	119
2004	11760	METTLER	340
2004	12136	MONTREAL*	630
2004	12190	MORITZ*	1,447
2004	12840	NORTH BAY*	226
2004	12860	NORTH SHORE*	245
2004	13959	PERIMETER	1,090
2004	14705	RANIER	7
2004	15090	RIM*	1,328
2004	15275	ROBIN	45
2004	15415	ROSEBUD	734
2004	15986	SCHMIDT	470
2004	17915	TITAN	79
2004	17985	TOPOC	92
2004	17997	TORONTO*	690
2004	19694	ANGELES	1,088
2005	2664	CALCADI	4
2005	5090	DISCOVERY	32
2005	7490	GRANITE	267
2005	9777	KINSEY	70
2005	10216	LAVA	55
2005	10670	LOMBARDY	94
2005	12722	NIPTON	33
2005	13776	PAT	1,151
2005	15282	ROBINSON CREEK	199
2005	15415	ROSEBUD	581
2005	16308	SHEEPHOLE	3
2005	17731	THACHER	457
2005	19136	WEISS	177

Year	Circuit	Circuit Name	Number of customers experiencing > 12 sustained outages
2006	5085	DINKEY CREEK	29
2006	14955	RHINEDOLLAR	64
2007	1832	BLUE CUT	193
2007	12847	NORTH-PARK	436
2007	17121	STROH	112
2008	2290	BROOKINGS	1
2008	3240	CEDAR GLEN	605
2008	4221	COVE	10
2008	4360	CRESTLINE	22
2008	4170	FROZEN	3
2008	8268	HEAPS PEAK	4
2008	8670	HOOK CREEK	147
2008	8848	HURST	6
2008	10119	LARK	147
2008	10216	LAVA	52
2008	12011	MIST	7
2008	14482	PUFF	2
2008	14690	RANGER	343
2008	14955	RHINEDOLLAR	31
2008	17997	TORONTO	47
2008	19036	WASP	46
2009	3240	CEDAR GLEN	19
2009	4136	COSO	45
2009	5492	EARTH	4
2009	8268	HEAPS PEAK	6
2009	14690	RANGER	301
2009	14955	RHINEDOLLAR	31
2009	16395	SHOSHONE	1
2009	17997	TORONTO	23

* bark beetle circuit

List >12 Sustained

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2009

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Lightning Storm	6/3/2009	3.848				N
2	Wild Fires	8/31/2009	3.837				N
3	Wild Fires	8/27/2009	2.935				N
4	Rain/Wind Storm	12/7/2009	2.436				N
5	Wind Storm	10/27/2009	1.993				N
6	Wild Fires	8/29/2009	1.983				N
7	Wind Storm	3/22/2009	1.724				N
8	Wild Fires	4/3/2009	1.564				N
9	Rain Storm	2/9/2009	1.543				N
10	Car Hit Pole	12/12/2009	1.222				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2008

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Rain/Wind Storm	1/24/2008	3.633				N
2	Wild Fires	7/2/2008	3.304				N
3	Rain/Wind Storm	1/4/2008	3.006				N
4	Rain/Wind Storm	12/17/2008	2.723				N
5	Rain/Wind Storm	2/3/2008	2.628				N
6	Rain/Wind Storm	12/15/2008	2.186				N
7	Rain/Wind Storm	1/5/2008	2.103				N
8	Rain/Wind Storm	12/25/2008	1.793				N
9	Rain/Wind Storm	1/27/2008	1.555				N
10	Rain/Wind Storm	1/25/2008	1.404				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2007

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Wild Fires	10/22/2007	18,310				N
2	Summer heat storm	9/3/2007	10,336				N
3	Wild Fires	10/21/2007	9,649	628,093	6,632	1,258	Y
4	Summer heat storm	9/2/2007	6,162				N
5	Rain/Wind Storm	3/27/2007	5,711				N
6	Summer heat storm	9/1/2007	3,398				N
7	Summer heat storm	8/31/2007	3,285				N
8	Wind Storm	12/25/2007	2,494				N
9	Summer heat storm	9/4/2007	2,334				N
10	Wind Storm	4/12/2007	2,215				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2006

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Summer heat storm	7/22/2006	15.441	527,572	6,748	1,616	Y
2	Winter rain storm	1/2/2006	10.478	720,251	4,532	684	Y
3	Summer heat storm	7/23/2006	4.866	170,590			N
4	Winter rain storm	12/27/2006	4.055	285,211			N
5	Winter rain storm	12/28/2006	3.084	155,839			N
6	Summer heat storm	7/24/2006	2.821	98,614			N
7	Summer heat storm	7/15/2006	2.492	159,258			N
8	Summer heat storm	7/20/2006	2.305	208,040			N
9	Summer heat storm	7/21/2006	2.085	238,707			N
10	Winter rain storm	1/22/2006	1.966	157,613			N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2005

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Winter Rain Storm	01/01/2005 - 01/11/2005	7.786	954,312	23,269	1,005	Y
2	Winter Rain Storm	02/16/2005 - 02/23/2005	5.713	696,946	8,233	641	Y
3	Lightning Storm	9/20/2005	3.887	624,737	2,910	391	Y
4	Lightning Storm	10/17/2005	3.693				N
5	Brush Fire	9/3/2005	2.121				N
6	Wind Storm	8/6/2005	1.683				N
7	Lightning Storm	7/24/2005	1.500				N
8	Lightning Storm	5/6/2005	1.235				N
9	Wind Storm	11/26/2005	1.089				N
10	Rain/Wind Storm	12/31/2005	1.061				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2004

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Winter Rain Storm	12/28/2004 - 12/31/2004	8.100	708,044	38,065	1,005	Y
2	Wind Storm	11/21/2004	2.571				N
3	Wind Storm	10/27/2004	2.389				N
4	Rain Storm	10/17/2004	1.999				N
5	Moorpark A-Bank	9/11/2004	1.622				N
6	Rain Storm	10/20/2004	1.610				N
7	Lightning Storm	8/12/2004	1.574				N
8	Rain Storm	10/19/2004	0.989				N
9	Wind Storm	11/22/2004	0.904				N
10	Lightning Storm	8/13/2004	0.883				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2003

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Santa Ana Wind Storm	01/06/2003 - 01/08/2003	17,228	1,236,698	7,731	2,551	Y
2	Southern California Wild Fires	10/24/2003 - 10/26/2003	6,105	601,653	12,808	1,919	Y
3	Rain Storm & Mud Slides	12/25/2003	3,468				N
4	Lightning Storm	11/12/2003	3,024				N
5	Santa Ana Wind Storm	01/05/2003	2,438				N
6	Rain Storm	02/25/2003	2,303				N
7	Rain Storm	10/31/2003	1,127				N
8	Wind Storm	03/17/2003	0,946				N
9	Wind Storm	02/12/2003	0,796				N
10	Lightning Storm	08/20/2003	0,770				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2002

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Rain/Wind Storm	12/16/2002	2.780				N
2	Rain/Wind Storm	11/8/2002	2.416				N
3	Mira Loma RAS / Louisiana Fire	06/26/2002 - 06/28/2002	2.307	600,607	3,996	50	Y
4	Rain/Wind Storm	11/9/2002	1.043				N
5	Rain Storm	11/25/2002	1.015				N
6	Wind Storm	2/9/2002	0.862				N
7	Car Hit Pole	10/4/2002	0.847				N
8	Rain/Wind Storm	11/7/2002	0.712				N
9	Heat Storm	9/1/2002	0.662				N
10	Rain Storm	2/17/2002	0.643				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2001

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Rain/Snow/Wind Storm	2/13/2001	3.107				N
2	Wind Storm	1/11/2001	1.729				N
3	Rain/Wind Storm	11/24/2001	1.671				N
4	Rain/Wind Storm	11/12/2001	1.180				N
5	Wind Storm	1/10/2001	0.921				N
6	Wind Storm	9/30/2001	0.598				N
7	Rain Storm	10/30/2001	0.591				N
8	Lightning Storm	7/6/2001	0.567				N
9	Structure Fire	6/21/2001	0.564				N
10	Rain/Snow/Wind Storm	2/12/2001	0.554				N

**Southern California Edison
Top 10 Annual Events
2000 - 2009**

2000

Attachment 3

Rank	Description	Date	SAIDI	Number of customers affected	Longest customer interruption (min)	Number of people used to restore service	CPUC major event?
1	Equipment Failure	10/26/2000	1.571				N
2	Rain/Wind Storm	4/18/2000	1.285				N
3	Rain/Wind Storm	2/20/2000	0.944				N
4	Rain/Wind Storm	2/21/2000	0.820				N
5	Car Hit Transmission Pole	4/3/2000	0.804				N
6	Wind Storm	3/21/2000	0.775				N
7	Rain/Wind Storm	3/5/2000	0.638				N
8	Rain Storm	9/22/2000	0.633				N
9	Rain/Wind Storm	4/17/2000	0.575				N
10	Equipment Failure	5/13/2000	0.551				N

Southern California Edison

Major Events

Number of customers w/o service at hourly interval

THIS TABLE CONTAINS ROLLING DAY DATA.

Attachment 4

Time	Mira Loma RAS	Mira Loma RAS	Mira Loma RAS	Santa Ana Wind Storm	Santa Ana Wind Storm	Santa Ana Wind Storm	Description of event
0	1,973	459	119	150,974	24,149	5,099	⇐ Date of event
1	1,995	459	808	177,276	26,720	9,867	
2	22	459	870	189,656	35,678	7,212	
3	-	9,716	1,364	169,700	23,267	5,691	
4	-	459	9,866	127,917	41,711	4,315	
5	-	4,571	285	112,215	48,693	4,155	
6	469	2,136	223	99,427	35,370	4,102	
7	-	589	3,485	84,646	31,423	4,137	
8	131	589	4,033	86,946	15,173	6,844	
9	-	501	352	58,992	13,628	7,833	
10	412	522	1,533	63,936	26,491	9,774	
11	114	1,302	599	60,261	35,427	8,491	
12	1,053	205	186	69,743	30,025	11,349	
13	622	114	124	77,406	24,075	11,607	
14	622	29	29	61,304	10,701	24,521	
15	-	101	29	45,025	9,033	6,537	
16	-	1,176	29	25,292	8,628	4,368	
17	-	1,918	4,095	25,852	11,222	4,000	
18	540,502	4,243	2,704	25,773	7,709	3,030	
19	16,349	119	227	29,423	12,265	2,930	
20	4,058	119	1,068	51,181	14,995	2,091	
21	1,690	119	227	27,891	12,993	2,026	
22	459	119	227	20,583	10,023	2,313	
23	2,827	119	227	33,400	11,230	1,540	

Southern California Edison

Major Events

Number of customers w/o service at hourly interval

THIS TABLE CONTAINS ROLLING DAY DATA.

Attachment 4

Time	Southern California Wild Fires	Southern California Wild Fires	Southern California Wild Fires	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Description of event
0	-	99	6,168	12,202	84,434	3,841	1,127		⇐ Date of event
1	81	4,491	60,988	7,187	71,180	4,368	1,906		
2	1,681	47	7,531	24,357	60,971	3,324	1,444		
3	110	47	193,783	40,904	47,181	3,834	2,590		
4	81	1,847	68,576	21,739	30,328	3,737	3,755		
5	602	14,854	45,513	15,563	24,823	3,249	3,888		
6	6,403	41	29,836	11,448	19,659	1,972	9,143		
7	521	3,546	7,319	30,504	18,040	1,219	7,295		
8	1,134	15,078	9,418	80,953	15,674	4,717	12,424		
9	637	1,317	5,937	30,040	13,206	1,640	19,566		
10	120,708	4,454	8,839	42,290	15,031	1,745	7,628		
11	653	3,256	7,889	30,355	11,669	5,737	8,981		
12	574	2,912	6,350	16,991	14,253	4,276	16,928		
13	15,893	2,295	28,195	17,970	15,084	5,481	10,208		
14	600	2,991	16,756	13,537	11,345	4,109	6,843		
15	590	30,036	14,368	5,871	7,682	6,491	11,140		
16	575	7,055	11,336	11,953	13,496	807	8,410		
17	575	9,159	10,253	92,301	5,765	629	2,556		
18	1,171	1,279	8,013	7,091	5,112	2,592	2,034		
19	616	2,759	5,758	12,949	7,681	2,904	2,536		
20	586	3,800	5,992	10,576	5,121	705	2,522		
21	727	3,087	5,619	7,987	4,092	1,738	4,294		
22	3,652	4,829	5,754	6,779	3,280	2,262	4,122		
23	1,606	4,722	4,065	17,630	6,271	4,535	4,375		

Southern California Edison

Major Events

Number of customers w/o service at hourly interval

THIS TABLE CONTAINS ROLLING DAY DATA.

Attachment 4

Time	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	⇌ Description of event
0	2,344	118	8,955	2,091	89	327	1,136	1,172					
1	2,921	398	1,652	2,270	5,160	281	488	24					
2	34	398	-	3,830	82	281	3,387	73					
3	358	420	5,475	600	82	281	555	18,858					
4	1,600	2,571	7	3,827	82	281	960	190					
5	4,906	303	3,637	807	66	275	3,054	379					
6	7,949	303	1,997	627	2,669	275	3,383	589					
7	2,774	1,665	7,844	3,186	3,824	2,611	2,136	26					
8	4,609	223	16,398	2,784	179	729	5,964	1,758					
9	540	223	5,447	33,282	166	981	3,644	2,049					
10	2,162	5,192	479	35,214	7,332	2,008	18,416	1,749					
11	4,074	6,462	29,734	6,727	2,209	1,911	14,005	1,156					
12	1,259	1,261	7,823	2,813	1,194	2,913	18,630	2,928					
13	508	1,860	4,983	1,239	1,192	675	12,035	10,653					
14	832	2,845	1,139	5,954	6,876	454	12,229	8,270					
15	508	140	5,396	1,593	2,886	620	5,695	5,987					
16	2,442	140	4,085	533	361	1,813	7,314	12,102					
17	172	140	825	116	385	1,783	6,025	7,942					
18	172	141	8,390	116	444	776	6,402	6,594					
19	42	141	13,318	2,102	278	1,561	4,794	3,573					
20	992	65	1,012	116	312	1,617	2,449	5,256					
21	1,068	64	5,787	1,011	2,716	304	5,710	7,556					
22	118	64	619	331	2,923	304	4,910	3,131					
23	118	64	619	89	336	1,074	1,313	10,803					

Southern California Edison Major Events

Number of customers w/o service at hourly interval

THIS TABLE CONTAINS ROLLING DAY DATA.

Attachment 4

Time	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Description of event
0	4,634	9,150	14,206	849	-	2,485	10,466	6,564				⇐ Date of event
1	5,353	12,379	17,009	125	229	1,495	17,924	3,539				
2	12,050	7,614	23,761	9	17	1,441	13,917	7,293				
3	5,806	6,362	11,891	3,916	837	1,441	20,607	1,694				
4	2,602	8,523	11,603	10	1,623	1,441	52,009	2,959				
5	14,378	7,153	17,849	10	323	4,579	48,850	2,831				
6	9,300	10,555	21,763	397	574	908	33,786	2,148				
7	14,493	12,129	19,731	397	622	2,737	27,551	5,496				
8	12,429	21,583	12,136	178	371	2,523	28,434	3,496				
9	24,223	25,889	11,853	191	706	502	9,986	1,428				
10	20,625	11,663	13,268	26	10,010	470	26,295	2,064				
11	15,716	14,795	14,945	2,782	9,127	4,659	21,866	2,673				
12	15,434	14,101	14,518	1,746	715	133	20,560	4,118				
13	14,768	25,907	16,991	1,092	1,406	133	12,826	1,424				
14	9,396	18,741	9,700	822	8,316	4,986	10,386	928				
15	12,776	17,297	8,543	227	946	6,229	8,937	646				
16	14,157	15,005	8,302	5,306	782	141	10,151	2,152				
17	18,536	11,146	12,089	2,379	4,792	141	7,290	3,921				
18	18,384	8,124	10,778	5,322	4,205	141	9,393	4,268				
19	10,382	15,219	1,684	4,002	4,969	1,123	8,156	3,741				
20	8,367	13,053	19,597	933	1,357	2,100	4,481	1,904				
21	16,640	11,746	11,712	933	1,357	1,246	5,405	13,372				
22	11,723	17,482	1,331	288	2,455	213	5,280	6,753				
23	10,832	13,659	971	-	2,401	21,056	7,146	17,008				

Southern California Edison

Major Events

Number of customers w/o service at hourly interval

THIS TABLE CONTAINS ROLLING DAY DATA.

Attachment 4

Time	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Lightning Storm	Winter Rain Storm	Summer Heat Storm	Wild Fires	Description of event
0	2/21/2005	2/22/2005	2/23/2005	9/20/2005	1/2/2006	7/22/2006	10/21/2007	⇨ Date of event
1	17,643	1,611	23,794	35,324	934	8,131	8,346	
2	13,966	1,398	23,651	73,173	2,485	6,528	13,208	
3	16,136	7,833	5,401	117,966	979	7,269	13,475	
4	12,916	5,314	4,219	94,719	3,901	7,257	42,878	
5	6,111	167	9,519	70,986	16,033	6,504	33,204	
6	10,876	3,305	5,111	59,321	23,872	4,299	54,764	
7	16,259	342	26,381	36,987	14,740	4,956	20,957	
8	9,266	339	9,743	44,392	35,171	4,806	45,298	
9	13,975	619	8,601	38,176	77,681	4,932	59,570	
10	5,374	4,169	7,510	59,889	191,661	2,263	53,648	
11	7,730	3,222	8,704	42,516	162,780	2,674	71,391	
12	10,107	6,973	11,041	62,892	169,871	3,161	67,827	
13	6,323	2,308	6,804	26,698	115,365	7,451	51,300	
14	12,967	3,533	5,970	21,128	87,849	19,300	43,260	
15	10,061	7,288	1,898	23,744	83,069	53,902	60,972	
16	3,940	2,330	1,347	16,056	79,866	105,045	49,155	
17	10,584	1,275	2,009	14,467	76,523	129,964	41,000	
18	10,439	7,048	2,811	10,871	57,515	134,398	51,141	
19	2,793	4,279	2,117	13,237	47,499	89,342	42,154	
20	4,762	4,235	1,142	9,521	36,870	145,110	53,578	
21	5,291	1,504	722	6,935	36,921	84,274	54,253	
22	7,568	2,594	620	6,730	29,519	76,624	45,699	
23	2,452	984	1,956	4,476	28,745	66,383	85,099	
	5,496	20,739	2,630	4,349	21,198	53,678	38,793	

Southern California Edison

Major Events

Number of customers w/o service by outage duration

Attachment 5

Outage Duration	Mira Loma RAS	Santa Ana Wind Storm	Southern California Wild Fires	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Winter Rain Storm	Lightning Storm	Winter Rain Storm	Summer Heat Storm	Wild Fires	Description of event
0 to 1 hour	583,670	788,468	491,078	409,325	561,834	377,235	440,023	572,274	422,684	522,063		
1 to 5 hours	7,126	172,308	58,450	151,123	203,015	153,424	64,816	101,467	55,577	67,433		
5 to 10 hours	5,835	59,570	11,547	60,160	101,172	70,856	33,672	25,500	15,986	21,017		
10 to 15 hours	1,203	57,778	4,883	38,830	45,767	54,924	28,181	10,751	7,881	4,637		
15 to 20 hours	2,744	55,373	1,996	16,205	17,431	30,162	17,358	3,862	4,703	4,349		
20 to 24 hours	-	15,325	4,081	10,963	7,955	6,708	11,119	898	3,591	1,585		
1 to 2 days	-	56,503	11,169	17,805	12,906	3,634	29,487	5,004	12,458	5,157		
2 to 3 days	29	24,949	1,734	1,062	13	-	81	459	4,036	1,574		
3 to 4 days	-	5,524	5,040	-	2,569	-	-	36	646	133		
4 to 5 days	-	-	7,169	2,564	504	-	-	-	10	145		
5 to 6 days	-	900	3,478	-	-	3	-	-	-	-		
6 to 7 days	-	-	25	-	-	-	-	-	-	-		
> 7 days	-	-	1,003	7	1,146	-	-	-	-	-		
Total	600,607	1,236,698	601,653	708,044	954,312	696,946	624,737	720,251	527,572	628,093		