



A  Sempra Energy utility<sup>SM</sup>

# **ELECTRIC SYSTEM RELIABILITY ANNUAL REPORT**

**2003**



**Prepared for  
California Public Utilities Commission**

**March 11, 2004**

## EXECUTIVE SUMMARY

This Electric System Reliability Annual Report for 2003 has been prepared in response to CPUC Decision 96-09-045. This Decision established additional reliability recording, calculation, and reporting requirements for SDG&E.

The data in this report is presented in tabular form. All statistics and calculations include forced transmission, substation, and distribution outages, and exclude planned outages. Forced outages are those that are not prearranged. For the purposes of this report, sustained outages are those outages that lasted 5 minutes or more in duration, while momentary outages are those outages that lasted less than 5 minutes in duration.

The reliability indicators that are tracked are as follows:

1. SAIDI (System Average Interruption Duration Index) - minutes of sustained outages per customer per year.
2. SAIFI (System Average Interruption Frequency Index) - number of sustained outages per customer per year.
3. MAIFI (Momentary Average Interruption Frequency Index) - number of momentary outages per customer per year.

The measurement of each reliability performance indicator excludes CPUC major events and events that are the direct result of failures in the ISO-controlled bulk power market, or non-SDG&E owned transmission and distribution facilities. A Major Event is defined in CPUC Decision 96-09-045 as an event that meets at least one of the following criteria:

- (a) The event is caused by earthquake, fire, or storms of sufficient intensity to give rise to a state of emergency being declared by the government, or
- (b) Any other disaster not in (a) that affects more than 15% of the system facilities or 10% of the utility's customers, whichever is less for each event.

A summary of 2003 performance follows:

| CRITERIA  | SAIDI  | SAIFI | MAIFI* |
|---|--------|-------|--------|
| Including CPUC Major Events (2003)                      | 298.86 | 0.86  | 0.87   |
| Excluding CPUC Major Events (2003)                      | 76.14  | 0.72  | 0.84   |
| 10-Year Average (1994-2003) Including CPUC Major Events | 104.80 | 0.89  | 0.99   |
| 10-Year Average (1994-2003) Excluding CPUC Major Events | 71.08  | 0.79  | 0.99   |

\* Only 8 years of MAIFI data is available.

The CPUC Major Events that were declared in 2003 are shown in the following table.

| Month/Day                | SAIDI  | SAIFI  | Sustained Customer Impact | MAIFI  | Momentary Customer Impact | Reason for Outage                                  |
|--------------------------|--------|--------|---------------------------|--------|---------------------------|--|
| January 6 - 8            | 28.98  | 0.0719 | 92,715                    | 0.0212 | 35,276                    | January Storm - >15% of System Facilities Affected |
| October 26 - November 25 | 193.33 | 0.0709 | 91,443                    | 0.0024 | 11,323                    | Firestorm 2003 - Declaration of State of Emergency |

In 2003, approximately 62 customers within SDG&E's service territory experienced more than one 5 minute (or longer) outage per month on a rolling annual average basis, after exclusion of CPUC Major Events.

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**HISTORICAL SYSTEM RELIABILITY DATA**

| Year | All Interruptions Included |       |       | CPUC Major Events Excluded |       |       |               |  |
|------|----------------------------|-------|-------|----------------------------|-------|-------|---------------|--|
|      | SAIDI                      | SAIFI | MAIFI | SAIDI                      | SAIFI | MAIFI | No. of Events | Event Cause(s)   |
| 1994 | 67.8                       | 0.92  | N/A   | 67.8                       | 0.92  | N/A   | 0             |  |
| 1995 | 98.5                       | 0.87  | N/A   | 56.9                       | 0.72  | N/A   | 1             | Storm/winds  |
| 1996 | 133.9                      | 1.48  | 1.53  | 81.9                       | 1.04  | 1.53  | 1             | Underfrequency condition   |
| 1997 | 89.3                       | 0.93  | 1.41  | 89.3                       | 0.93  | 1.41  | 0             |  |
| 1998 | 91.6                       | 0.94  | 1.09  | 91.6                       | 0.94  | 1.09  | 0             |  |
| 1999 | 65.2                       | 0.67  | 0.80  | 65.2                       | 0.67  | 0.80  | 0             |  |
| 2000 | 51.9                       | 0.57  | 0.75  | 51.9                       | 0.57  | 0.75  | 0             |  |
| 2001 | 68.5                       | 0.87  | 0.87  | 52.9                       | 0.64  | 0.86  | 7             | Fires (2), Load Curtailment (4), and Interruptions Due to Non-SDG&E Facilities (1) |
| 2002 | 82.5                       | 0.81  | 0.61  | 77.2                       | 0.81  | 0.61  | 4             | Fires (2), Interruptions Due to Non-SDG&E Facilities (2)                           |
| 2003 | 298.9                      | 0.86  | 0.87  | 76.1                       | 0.72  | 0.84  | 2             | Firestorm 2003, Storm Affecting >15% of Facilities                                 |

**TEN LARGEST OUTAGE EVENTS IN 2003\***

| Rank | Date              | Description   | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|-------------------|---|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Oct. 26 - Nov. 25 | Firestorm 2003                                      | 193.33       | 0.071        | Yes               | 91,443                             | 43,032                                  | Not Available                            |
| 2    | Jan. 6 - 8        | Storm / Winds                                       | 28.98        | 0.072        | Yes               | 92,715                             | 2,548                                   | Not Available                            |
| 3    | Oct. 27 - 28      | Substation - Animal Contact                         | 3.10         | 0.017        | No                | 22,285                             | 227                                     | Not Available                            |
| 4    | Dec. 25 - 26      | Storm / Winds                                       | 3.00         | 0.017        | No                | 21,611                             | 1,303                                   | Not Available                            |
| 5    | May 14 - 15       | Transmission Line - Heavy Equipment Contact (Crane) | 1.47         | 0.002        | No                | 2,900                              | 1,832                                   | Not Available                            |
| 6    | Mar. 28 - 30      | Storm / Winds                                       | 1.25         | 0.003        | No                | 3,767                              | 1,440                                   | Not Available                            |
| 7    | Sep. 2 - 3        | Storm / Winds                                       | 1.06         | 0.014        | No                | 18,025                             | 678                                     | Not Available                            |
| 8    | Oct. 5 - 6        | Underground Cable Failure                           | 0.97         | 0.004        | No                | 5,255                              | 841                                     | Not Available                            |
| 9    | Jan. 12           | Substation - Animal Contact                         | 0.97         | 0.014        | No                | 17,990                             | 73                                      | Not Available                            |
| 10   | Sep. 19 - 20      | Underground Cable Failure                           | 0.88         | 0.004        | No                | 5,334                              | 1,010                                   | Not Available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 2002\***

| Rank | Date              | Description                               | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected ** | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|-------------------|---|--------------|--------------|-------------------|---------------------------------------|---|--|
| 1    | Feb. 27           | Accidental Trip of Circuit Breaker        | 6.00         | 0.173        | No                | 219,522                               | 62                                      | Not Available                            |
| 2    | Feb. 9 - 11       | Storm / Winds                             | 3.41         | 0.023        | No                | 28,987                                | 1,587                                   | Not Available                            |
| 3    | Feb. 10 - 13      | Fallbrook (Gavilan) Fire - Request by CDF | 2.99         | 0.003        | Yes               | 3,732                                 | 4,107                                   | Not Available                            |
| 4    | Aug. 31 - Sep. 3  | Storm / Heat                              | 2.94         | 0.023        | No                | 28,836                                | 775                                     | Not Available                            |
| 5    | July 29 - Aug. 12 | Pines Wildland Fire - State of Emergency  | 2.34         | 0.003        | Yes               | 3,498                                 | 10,227                                  | Not Available                            |
| 6    | Nov. 25 - 30      | Storm / Winds                             | 2.16         | 0.014        | No                | 18,108                                | 1,493                                   | Not Available                            |
| 7    | Apr. 5            | Circuit Breaker Failure                   | 1.79         | 0.008        | No                | 10,591                                | 306                                     | Not Available                            |
| 8    | Apr. 22 - 23      | Crossarm Failure                          | 1.35         | 0.004        | No                | 5,219                                 | 603                                     | Not Available                            |
| 9    | Dec. 16 - 18      | Storm / Winds                             | 1.23         | 0.008        | No                | 10,078                                | 1,106                                   | Not Available                            |
| 10   | July 23 - 24      | Switch Faulted / Mechanical               | 1.07         | 0.006        | No                | 7,284                                 | 586                                     | Not Available                            |

\*Based on SAIDI impact.

\*\* Total Number of Customers Affected were reported incorrectly in 2002. These values have been updated for 2003; the adjustment had no affect on the reported SAIDI and SAIFI Impacts for these events.



**TEN LARGEST OUTAGE EVENTS IN 2001\***

| Rank | Date       | Description  | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|------------|--|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Mar. 19    | Load curtailment - ISO request                             | 10.91        | 0.153        | Yes               | 191,146                            | 164                                     | Not available                            |
| 2    | Mar. 20    | Load curtailment - ISO request                             | 3.74         | 0.063        | Yes               | 78,446                             | 71                                      | Not available                            |
| 3    | July 17    | Remedial Action Scheme inadvertently interrupted customers | 1.21         | 0.121        | No                | 150,959                            | 40                                      | Not available                            |
| 4    | May 22     | Substation - Animal contact                                | 0.79         | 0.009        | No                | 11,238                             | 88                                      | Not available                            |
| 5    | Jan. 11-12 | Storm/winds  | 0.73         | 0.006        | No                | 6,988                              | 1,886                                   | Not available                            |
| 6    | Feb. 13    | Storm/winds  | 0.70         | 0.003        | No                | 3,541                              | 728                                     | Not available                            |
| 7    | Apr. 7     | Private vehicle contact                                    | 0.69         | 0.002        | No                | 1,939                              | 874                                     | Not available                            |
| 8    | May 29     | Transmission Line - Bird contact                           | 0.66         | 0.012        | No                | 14,996                             | 120                                     | Not available                            |
| 9    | May 8      | Load curtailment - ISO request                             | 0.64         | 0.012        | Yes               | 14,730                             | 81                                      | Not available                            |
| 10   | Jan. 10    | Underground cable failure                                  | 0.64         | 0.002        | Yes               | 2,330                              | 499                                     | Not available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 2000\***

| Rank | Date       | Description                          | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|------------|--------------------------------------|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Sept. 7-8  | Lightning/Storm                      | 2.59         | 0.011        | No                | 13,258                             | 925                                     | Not available                            |
| 2    | Aug. 29    | Transmission poles down due to storm | 2.33         | 0.004        | No                | 4,363                              | 1,301                                   | Not available                            |
| 3    | Aug. 20    | Underground cable failure            | 1.55         | 0.004        | No                | 4,624                              | 823                                     | Not available                            |
| 4    | Oct. 30    | Substation animal contact            | 1.36         | 0.009        | No                | 11,240                             | 149                                     | Not available                            |
| 5    | Feb. 20-21 | Storm/winds                          | 1.13         | 0.012        | No                | 15,092                             | 648                                     | Not available                            |
| 6    | Mar. 5     | Storm/winds                          | 0.72         | 0.007        | No                | 8,593                              | 393                                     | Not available                            |
| 7    | Apr. 17    | Storm/winds                          | 0.69         | 0.007        | No                | 8,769                              | 690                                     | Not available                            |
| 8    | Apr. 4     | Circuit breaker faulted              | 0.69         | 0.017        | No                | 20,544                             | 41                                      | Not available                            |
| 9    | Sept. 15   | Underground cable failure            | 0.68         | 0.003        | No                | 4,223                              | 364                                     | Not available                            |
| 10   | Oct. 5     | Underground cable failure            | 0.68         | 0.002        | No                | 2,798                              | 558                                     | Not available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 1999\***

| Rank | Date     | Description               | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|----------|---------------------------|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Sept. 27 | Circuit breaker failure   | 4.29         | 0.02         | No                | 22,658                             | 375                                     | Not available                            |
| 2    | Aug. 6   | Underground cable         | 1.71         | 0.01         | No                | 6,965                              | 822                                     | Not available                            |
| 3    | Oct. 21  | Animal contact            | 1.29         | 0.01         | No                | 12,520                             | 158                                     | Not available                            |
| 4    | Jan. 29  | Private vehicle contact   | 1.00         | 0.01         | No                | 6,312                              | 1,215                                   | Not available                            |
| 5    | Apr. 1   | Switch faulted/mechanical | 0.96         | 0.01         | No                | 6,402                              | 304                                     | Not available                            |
| 6    | Apr. 4   | Capacitor failure         | 0.92         | 0.00         | No                | 4,555                              | 269                                     | Not available                            |
| 7    | Apr. 6-7 | Storm/winds               | 0.84         | 0.01         | No                | 7,000                              | 1,719                                   | Not available                            |
| 8    | Jun. 12  | Animal contact            | 0.75         | 0.00         | No                | 5,642                              | 163                                     | Not available                            |
| 9    | Nov. 11  | Relay malfunction         | 0.72         | 0.01         | No                | 15,391                             | 57                                      | Not available                            |
| 10   | Sept. 26 | Underground cable failure | 0.69         | 0.00         | No                | 2,800                              | 365                                     | Not available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 1998\***

| Rank | Date            | Description                      | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|-----------------|----------------------------------|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Aug. 31-Sept. 1 | Storm/lightning/winds/heat storm | 6.29         | 0.02         | No                | 28,987                             | 1,577                                   | Not available                            |
| 2    | Feb. 23-24      | Storm/winds                      | 4.63         | 0.04         | No                | 51,540                             | 1,297                                   | Not available                            |
| 3    | Aug. 29-30      | Heat Storm                       | 3.69         | 0.03         | No                | 35,526                             | 889                                     | Not available                            |
| 4    | Feb. 7-8        | Storm/winds                      | 3.10         | 0.02         | No                | 22,680                             | 946                                     | Not available                            |
| 5    | Feb. 14-15      | Storm/winds                      | 2.69         | 0.03         | No                | 35,851                             | 1,025                                   | Not available                            |
| 6    | Dec. 6          | Storm/winds                      | 2.59         | 0.03         | No                | 31,208                             | 966                                     | Not available                            |
| 7    | Sept. 2-3       | Storm/lightning/winds            | 2.10         | 0.02         | No                | 24,793                             | 1,172                                   | Not available                            |
| 8    | Mar. 28-29      | Storm/winds                      | 2.09         | 0.01         | No                | 17,450                             | 1,557                                   | Not available                            |
| 9    | Feb. 3-4        | Storm/winds                      | 1.36         | 0.02         | No                | 22,303                             | 456                                     | Not available                            |
| 10   | Feb. 6          | Storm/winds                      | 1.25         | 0.02         | No                | 18,443                             | 1,512                                   | Not available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 1997\***

| Rank | Date        | Description                   | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|-------------|-------------------------------|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Sept. 24-25 | Storm/winds                   | 5.75         | 0.06         | No                | 67,036                             | 4,413                                   | Not available                            |
| 2    | Dec. 10     | Storm/winds                   | 4.23         | 0.03         | No                | 31,909                             | 773                                     | Not available                            |
| 3    | Dec. 11     | Storm/winds                   | 2.91         | 0.03         | No                | 35,698                             | 814                                     | Not available                            |
| 4    | Nov. 26     | Storm/winds                   | 2.85         | 0.02         | No                | 27,486                             | 1,224                                   | Not available                            |
| 5    | Jan. 6-7    | Storm/winds                   | 2.77         | 0.04         | No                | 42,307                             | 803                                     | Not available                            |
| 6    | Jan. 12-13  | Storm/winds                   | 2.04         | 0.01         | No                | 17,033                             | 1,134                                   | Not available                            |
| 7    | Jan. 26     | Storm/winds                   | 1.99         | 0.03         | No                | 29,612                             | 589                                     | Not available                            |
| 8    | Nov. 10     | Storm/winds                   | 1.67         | 0.03         | No                | 34,685                             | 765                                     | Not available                            |
| 9    | July 6      | Hardware failure - substation | 1.54         | 0.02         | No                | 18,948                             | 508                                     | Not available                            |
| 10   | Dec. 6      | Storm/winds                   | 1.07         | 0.01         | No                | 14,310                             | 656                                     | Not available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 1996\***

| Rank | Date       | Description                        | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|------------|------------------------------------|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Aug. 10    | Underfrequency load shed condition | 51.93        | 0.44         | Yes               | 517,884                            | 428                                     | 35                                       |
| 2    | Oct. 21-22 | Storm/high winds                   | 7.47         | 0.04         | No                | 51,708                             | 2,172                                   | Not available                            |
| 3    | Dec. 15-18 | Storm/high winds                   | 5.84         | 0.06         | No                | 72,492                             | 1,609                                   | Not available                            |
| 4    | Feb. 25-26 | Storm/high winds                   | 3.69         | 0.04         | No                | 49,455                             | 2,243                                   | Not available                            |
| 5    | Jan. 1-2   | Storm/high winds                   | 2.94         | 0.03         | No                | 39,892                             | 1,168                                   | Not available                            |
| 6    | July 4     | Faulted transmission cable         | 2.90         | 0.03         | No                | 40,297                             | 435                                     | Not available                            |
| 7    | Nov. 21-22 | Storm/high winds                   | 2.36         | 0.02         | No                | 28,368                             | 647                                     | Not available                            |
| 8    | July 2     | Underfrequency load shed condition | 2.19         | 0.08         | No                | 96,019                             | 57                                      | Not available                            |
| 9    | Oct. 30    | Storm/high winds                   | 1.72         | 0.02         | No                | 26,699                             | 416                                     | Not available                            |
| 10   | Dec. 28    | Transformer faulted - substation   | 1.47         | 0.02         | No                | 19,635                             | 115                                     | Not available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 1995\***

| Rank | Date       | Description            | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|------------|------------------------|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | Jan. 4-6   | Storm/winds            | 41.60        | 0.14         | Yes               | 166,940                            | 2,042                                   | Not available                            |
| 2    | Sept. 2    | OCB faulted/mechanical | 3.02         | 0.02         | No                | 18,757                             | 860                                     | Not available                            |
| 3    | Mar. 11    | Storm/winds            | 2.19         | 0.02         | No                | 28,405                             | 1,104                                   | Not available                            |
| 4    | Mar. 5     | Storm/winds            | 1.21         | 0.01         | No                | 13,263                             | 1,326                                   | Not available                            |
| 5    | Jan. 18    | Undetermined           | 1.12         | 0.01         | No                | 16,171                             | 217                                     | Not available                            |
| 6    | Feb. 19-21 | Storm/winds            | 1.07         | 0.01         | No                | 15,977                             | 590                                     | Not available                            |
| 7    | July 16    | Storm/winds            | 1.04         | 0.01         | No                | 10,683                             | 553                                     | Not available                            |
| 8    | Mar. 21    | Storm/winds            | 1.02         | 0.01         | No                | 9,735                              | 308                                     | Not available                            |
| 9    | July 17    | Fire                   | 0.98         | 0.04         | No                | 41,212                             | 342                                     | Not available                            |
| 10   | Nov. 19    | Vehicle contact        | 0.96         | 0.01         | No                | 6,905                              | 381                                     | Not available                            |

\*Based on SAIDI impact.

**TEN LARGEST OUTAGE EVENTS IN 1994\***

| Rank | Date       | Description                         | SAIDI Impact | SAIFI Impact | CPUC Major Event? | Total Number of Customers Affected | Longest Customer Interruption (minutes) | Number of People Used to Restore Service |
|------|------------|-------------------------------------|--------------|--------------|-------------------|------------------------------------|---|--|
| 1    | July 1     | Storm/winds                         | 6.40         | 0.04         | No                | 47,488                             | 858                                     | Not available                            |
| 2    | Feb. 7     | Storm/winds                         | 3.62         | 0.03         | No                | 38,408                             | 447                                     | Not available                            |
| 3    | Oct. 7-9   | Storm/winds                         | 2.97         | 0.03         | No                | 37,128                             | 603                                     | Not available                            |
| 4    | Dec. 25    | Connector/jumper/LBE/racks          | 2.31         | 0.04         | No                | 40,980                             | 222                                     | Not available                            |
| 5    | Oct. 24    | Insulator/pin failure/wire floating | 2.20         | 0.03         | No                | 30,221                             | 443                                     | Not available                            |
| 6    | Sept. 22   | SDG&E line fault/hot wash           | 1.31         | 0.01         | No                | 14,574                             | 360                                     | Not available                            |
| 7    | Aug. 20    | Foreign object in distribution line | 0.97         | 0.02         | No                | 18,422                             | 462                                     | Not available                            |
| 8    | Apr. 26    | Storm/winds                         | 0.95         | 0.02         | No                | 18,483                             | 444                                     | Not available                            |
| 9    | Sept. 23   | Animal contact                      | 0.94         | 0.01         | No                | 10,280                             | 470                                     | Not available                            |
| 10   | Jan. 24-25 | Storm/winds                         | 0.82         | 0.01         | No                | 12,554                             | 202                                     | Not available                            |

\*Based on SAIDI impact.



**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2003**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage | Description of Outage                              | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day*                   |           |           |           |           |           |           |           |           |
|----------------|--|--|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                |  |  | 2   | 4         | 6         | 8         | 10        | 12        | 14        | 16        | 18        |
| January 6 - 8  | January Storm - >15% of System Facilities Affected | 92,715                                   | 0   | 165       | 2,374     | 3,500     | 5,231     | 4,985     | 2,916     | 4,272     | 33        |
|                |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                |  |  | <b>20</b>   | <b>22</b> | <b>24</b> | <b>26</b> | <b>28</b> | <b>30</b> | <b>32</b> | <b>34</b> | <b>36</b> |
|                |  |  | 2,908   | 2,875     | 299       | 8,799     | 42,386    | 62,337    | 44,408    | 34,801    | 29,472    |
|                |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                |  |  | <b>38</b>   | <b>40</b> | <b>42</b> | <b>44</b> | <b>46</b> | <b>48</b> | <b>50</b> | <b>52</b> | <b>54</b> |
|                |  |  | 23,942  | 18,661    | 7,533     | 4,709     | 3,687     | 3,391     | 2,489     | 1,563     | 1,077     |
|                |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                |  |  | <b>56</b>   | <b>58</b> | <b>60</b> | <b>62</b> | <b>64</b> | <b>66</b> | <b>68</b> | <b>70</b> | <b>72</b> |
|                |  |  | 1,021   | 648       | 581       | 92        | 94        | 69        | 69        | 37        | 37        |
|                |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                |  |  | <b>74</b>   | <b>76</b> | <b>78</b> | <b>80</b> | <b>82</b> | <b>84</b> | <b>86</b> | <b>88</b> | <b>90</b> |
|                |  |  | 25  | 25        | 0         | 0         | 0         | 0         | 0         | 0         | 0         |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2003  
EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage  | Description of Outage                              | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day*                   |        |        |        |        |        |        |        |        |
|---|--|--|---|--------|--------|--------|--------|--------|--------|--------|--------|
|   |  |  | 0   | 5      | 10     | 15     | 20     | 25     | 30     | 35     | 40     |
| October 26 -<br>November 25   | Firestorm 2003 - Declaration of State of Emergency | 91,443                                   | 0   | 697    | 12,087 | 25,599 | 33,856 | 33,575 | 35,317 | 43,272 | 44,623 |
|   |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |        |        |        |        |        |        |        |        |
|   |  |  | 45  | 50     | 55     | 60     | 65     | 70     | 75     | 80     | 85     |
|   |  |  | 43,523  | 38,774 | 28,412 | 26,932 | 24,552 | 24,157 | 21,108 | 20,628 | 17,709 |
|   |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |        |        |        |        |        |        |        |        |
|   |  |  | 90  | 95     | 100    | 105    | 110    | 115    | 120    | 125    | 130    |
|   |  |  | 16,330  | 17,074 | 17,074 | 16,013 | 14,356 | 12,195 | 11,878 | 11,878 | 11,878 |
|   |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |        |        |        |        |        |        |        |        |
|   |  |  | 135   | 140    | 145    | 150    | 155    | 160    | 165    | 170    | 175    |
|   |  |  | 11,214  | 6,643  | 1,050  | 833    | 813    | 379    | 635    | 820    | 820    |
|   |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |        |        |        |        |        |        |        |        |
|   |  |  | 180   | 185    | 190    | 195    | 200    | 205    | 210    | 215    | 220    |
|   |  |  | 820   | 820    | 777    | 777    | 777    | 635    | 2,357  | 2,563  | 2,563  |
|   |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |        |        |        |        |        |        |        |        |
|   |  |  | 225   | 230    | 235    | 240    | 245    | 250    | 255    | 260    | 265    |
|   |  |  | 2,563   | 2,835  | 2,149  | 2,149  | 2,149  | 1,166  | 1,089  | 890    | 873    |
|   |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |        |        |        |        |        |        |        |        |
|   |  |  | 270   | 275    | 280    | 285    | 290    | 295    | 300    | 305    | 310    |
|   |  |  | 849   | 827    | 867    | 948    | 948    | 948    | 795    | 738    | 566    |
|   |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |        |        |        |        |        |        |        |        |
| 315   | 320  | 325                                      | 330   | 335    | 340    | 345    | 350    | 355    |        |        |        |
| 535   | 535  | 432                                      | 432   | 432    | 432    | 432    | 324    | 312    |        |        |        |
| <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |  |  |   |        |        |        |        |        |        |        |        |
| 360   | 365  | 370                                      | 375   | 380    | 385    | 390    | 395    | 400    |        |        |        |
| 312   | 312  | 312                                      | 82  | 68     | 68     | 68     | 51     | 52     |        |        |        |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2003**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage           | Description of Outage                              | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|--------------------------|--|--|--|-----|-----|-----|-----|-----|-----|-----|-----|
|                          |  |  | 405  | 410 | 415 | 420 | 425 | 430 | 435 | 440 | 445 |
| October 26 - November 25 | Firestorm 2003 - Declaration of State of Emergency | 91,443                                   | 49   | 49  | 49  | 49  | 49  | 49  | 49  | 49  | 49  |
|                          |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                          |  |  | 49   | 49  | 49  | 49  | 48  | 48  | 48  | 48  | 48  |
|                          |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                          |  |  | 48   | 48  | 48  | 48  | 48  | 48  | 48  | 48  | 48  |
|                          |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                          |  |  | 47   | 47  | 47  | 47  | 47  | 47  | 47  | 47  | 47  |
|                          |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                          |  |  | 48   | 40  | 40  | 40  | 40  | 40  | 40  | 40  | 40  |
|                          |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                          |  |  | 40   | 40  | 40  | 40  | 40  | 40  | 40  | 9   | 9   |
|                          |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                          |  |  | 9  | 9   | 9   | 9   | 9   | 9   | 9   | 9   | 9   |
|                          |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                          |  |  | 9  | 9   | 9   | 9   | 0   | 0   | 0   | 0   | 0   |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2002**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage   | Description of Outage                     | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day*                   |           |           |           |           |           |           |           |           |
|------------------|---|--|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                  |   |  | 2   | 4         | 6         | 8         | 10        | 12        | 14        | 16        | 18        |
| February 10 - 13 | Fallbrook (Gavilan) Fire - Request by CDF | 3,732                                    | 0   | 0         | 0         | 0         | 0         | 0         | 2,083     | 3,732     | 2,592     |
|                  |   |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                  |   |  | <b>20</b>   | <b>22</b> | <b>24</b> | <b>26</b> | <b>28</b> | <b>30</b> | <b>32</b> | <b>34</b> | <b>36</b> |
|                  |   |  | 2,083   | 1,008     | 1,008     | 1,008     | 1,008     | 1,008     | 1,008     | 1,008     | 1,008     |
|                  |   |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                  |   |  | <b>38</b>   | <b>40</b> | <b>42</b> | <b>44</b> | <b>46</b> | <b>48</b> | <b>50</b> | <b>52</b> | <b>54</b> |
|                  |   |  | 871   | 871       | 871       | 762       | 762       | 762       | 762       | 762       | 762       |
|                  |   |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                  |   |  | <b>56</b>   | <b>58</b> | <b>60</b> | <b>62</b> | <b>64</b> | <b>66</b> | <b>68</b> | <b>70</b> | <b>72</b> |
|                  |   |  | 762   | 762       | 762       | 762       | 762       | 728       | 728       | 728       | 728       |
|                  |   |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |           |           |           |           |           |
|                  |   |  | <b>74</b>   | <b>76</b> | <b>78</b> | <b>80</b> | <b>82</b> | <b>84</b> | <b>86</b> | <b>88</b> | <b>90</b> |
|                  |   |  | 19  | 19        | 19        | 19        | 0         | 0         | 0         | 0         | 0         |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2002**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage      | Description of Outage                    | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day*                   |           |           |           |            |            |            |            |            |
|---------------------|--|--|---|-----------|-----------|-----------|------------|------------|------------|------------|------------|
|                     |  |  | 2   | 4         | 6         | 8         | 10         | 12         | 14         | 16         | 18         |
| July 29 - August 12 | Pines Wildland Fire - State of Emergency | 3,498                                    | 0   | 0         | 0         | 0         | 0          | 0          | 0          | 3          | 3          |
|                     |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |            |            |            |            |            |
|                     |  |  | <b>20</b>   | <b>22</b> | <b>24</b> | <b>26</b> | <b>28</b>  | <b>30</b>  | <b>32</b>  | <b>34</b>  | <b>36</b>  |
|                     |  |  | 338   | 338       | 338       | 338       | 338        | 338        | 338        | 338        | 866        |
|                     |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |            |            |            |            |            |
|                     |  |  | <b>38</b>   | <b>40</b> | <b>42</b> | <b>44</b> | <b>46</b>  | <b>48</b>  | <b>50</b>  | <b>52</b>  | <b>54</b>  |
|                     |  |  | 794   | 794       | 338       | 338       | 338        | 338        | 338        | 338        | 338        |
|                     |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |            |            |            |            |            |
|                     |  |  | <b>56</b>   | <b>58</b> | <b>60</b> | <b>62</b> | <b>64</b>  | <b>66</b>  | <b>68</b>  | <b>70</b>  | <b>72</b>  |
|                     |  |  | 338   | 338       | 338       | 338       | 338        | 338        | 338        | 338        | 338        |
|                     |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |            |            |            |            |            |
|                     |  |  | <b>74</b>   | <b>76</b> | <b>78</b> | <b>80</b> | <b>82</b>  | <b>84</b>  | <b>86</b>  | <b>88</b>  | <b>90</b>  |
|                     |  |  | 338   | 338       | 338       | 338       | 338        | 338        | 338        | 338        | 3          |
|                     |  |  | <b>Customers Interrupted - Hours Into the Event Day (continued)</b> |           |           |           |            |            |            |            |            |
|                     |  |  | <b>92</b>   | <b>94</b> | <b>96</b> | <b>98</b> | <b>100</b> | <b>102</b> | <b>104</b> | <b>106</b> | <b>108</b> |
|                     |  |  | 3   | 3         | 3         | 3         | 3          | 3          | 3          | 0          | 0          |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2002**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage   | Description of Outage                    | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day (continued)* |     |     |     |     |     |     |     |     |
|--|--|--|---|-----|-----|-----|-----|-----|-----|-----|-----|
|  |  |  | 110   | 112 | 114 | 116 | 118 | 120 | 122 | 124 | 126 |
| July 29 - August 12  | Pines Wildland Fire - State of Emergency | 3,498                                    | 0   | 0   | 0   | 0   | 0   | 0   | 10  | 10  | 10  |
|  |  |  | Customers Interrupted - Hours Into the Event Day (continued)  |     |     |     |     |     |     |     |     |
|  |  |  | 128   | 130 | 132 | 134 | 136 | 138 | 140 | 142 | 144 |
|  |  |  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  |
|  |  |  | Customers Interrupted - Hours Into the Event Day (continued)  |     |     |     |     |     |     |     |     |
|  |  |  | 146   | 148 | 150 | 152 | 154 | 156 | 158 | 160 | 162 |
|  |  |  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  | 10  |
|  |  |  | Customers Interrupted - Hours Into the Event Day (continued)  |     |     |     |     |     |     |     |     |
|  |  |  | 164   | 166 | 168 | 170 | 172 | 174 | 176 | 178 | 180 |
|  |  |  | 10  | 10  | 10  | 258 | 258 | 258 | 258 | 258 | 258 |
|  |  |  | Customers Interrupted - Hours Into the Event Day (continued)  |     |     |     |     |     |     |     |     |
|  |  |  | 182   | 184 | 186 | 188 | 190 | 192 | 194 | 196 | 198 |
|  |  |  | 258   | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 |
|  |  |  | Customers Interrupted - Hours Into the Event Day (continued)  |     |     |     |     |     |     |     |     |
|  |  |  | 200   | 202 | 204 | 206 | 208 | 210 | 212 | 214 | 216 |
|  |  |  | 258   | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 |
| Customers Interrupted - Hours Into the Event Day (continued) |  |  |   |     |     |     |     |     |     |     |     |
| 218  | 220                                      | 222                                      | 224   | 226 | 228 | 230 | 232 | 234 |     |     |     |
| 258  | 258                                      | 258                                      | 258   | 224 | 224 | 224 | 224 | 224 |     |     |     |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2002**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage      | Description of Outage                    | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|---------------------|--|--|--|-----|-----|-----|-----|-----|-----|-----|-----|
|                     |  |  | 236  | 238 | 240 | 242 | 244 | 246 | 248 | 250 | 252 |
| July 29 - August 12 | Pines Wildland Fire - State of Emergency | 3,498                                    | 224  | 224 | 224 | 224 | 217 | 122 | 122 | 122 | 122 |
|                     |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                     |  |  | 254  | 256 | 258 | 260 | 262 | 264 | 266 | 268 | 270 |
|                     |  |  | 122  | 122 | 122 | 122 | 122 | 122 | 122 | 122 | 122 |
|                     |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                     |  |  | 272  | 274 | 276 | 278 | 280 | 282 | 284 | 286 | 288 |
|                     |  |  | 122  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  |
|                     |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                     |  |  | 290  | 292 | 294 | 296 | 298 | 300 | 302 | 304 | 306 |
|                     |  |  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
|                     |  |  | 308  | 310 | 312 | 314 | 316 | 318 | 320 | 322 | 324 |
|                     |  |  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
|                     |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                     |  |  | 326  | 328 | 330 | 332 | 334 | 336 | 338 | 340 | 342 |
|                     |  |  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
|                     |  |  | Customers Interrupted - Hours Into the Event Day (continued) |     |     |     |     |     |     |     |     |
|                     |  |  | 344  | 346 | 348 | 350 | 352 | 354 | 356 | 358 | 360 |
|                     |  |  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2001**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage | Description of Outage          | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day*            |    |    |    |    |        |        |        |    |
|----------------|--------------------------------|--|--|----|----|----|----|--------|--------|--------|----|
|                |                                |  | 2  | 4  | 6  | 8  | 10 | 12     | 14     | 16     | 18 |
| 3/19/2001      | Load curtailment - ISO request | 191,146                                  | 0  | 0  | 0  | 0  | 0  | 30,590 | 68,143 | 28,067 | 0  |
|                |                                |  | Customers Interrupted - Hours Into the Event Day (continued) |    |    |    |    |        |        |        |    |
|                |                                |  | 20   | 22 | 24 | 26 | 28 | 30     | 32     | 34     | 36 |
|                |                                |  | 0  | 0  | 0  | 0  | 0  | 0      | 0      | 0      | 0  |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

| Date of Outage | Description of Outage          | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day*            |    |    |    |        |        |        |    |    |
|----------------|--------------------------------|--|--|----|----|----|--------|--------|--------|----|----|
|                |                                |  | 2  | 4  | 6  | 8  | 10     | 12     | 14     | 16 | 18 |
| 3/20/2001      | Load curtailment - ISO request | 78,446                                   | 0  | 0  | 0  | 0  | 11,181 | 10,189 | 10,838 | 0  | 0  |
|                |                                |  | Customers Interrupted - Hours Into the Event Day (continued) |    |    |    |        |        |        |    |    |
|                |                                |  | 20   | 22 | 24 | 26 | 28     | 30     | 32     | 34 | 36 |
|                |                                |  | 0  | 0  | 0  | 0  | 0      | 0      | 0      | 0  | 0  |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.



**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 2001**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage | Description of Outage          | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day*            |    |    |    |    |    |    |       |    |  |
|----------------|--------------------------------|--|--|----|----|----|----|----|----|-------|----|--|
|                |                                |  | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16    | 18 |  |
| 5/8/2001       | Load curtailment - ISO request | 14,730                                   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 7,409 | 0  |  |
|                |                                |  | Customers Interrupted - Hours Into the Event Day (continued) |    |    |    |    |    |    |       |    |  |
|                |                                |  | 20   | 22 | 24 | 26 | 28 | 30 | 32 | 34    | 36 |  |
|                |                                |  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0     | 0  |  |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 1997 through 2000**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

There were no CPUC Major Events from 1997 through 2000.

## EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 1996

### EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS

| Date of Outage | Description of Outage              | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day for 8/10 Underfrequency* |     |     |    |    |    |    |         |         |
|----------------|------------------------------------|--|---|-----|-----|----|----|----|----|---------|---------|
|                |                                    |  | 2   | 4   | 6   | 8  | 10 | 12 | 14 | 16      | 18      |
| August 10      | Underfrequency load shed condition | 517,884                                  | 55  | 319 | 202 | 12 | 12 | 0  | 0  | 483,510 | 116,846 |
|                |                                    |  | Customers Interrupted - Hours Into the Event Day (continued)              |     |     |    |    |    |    |         |         |
|                |                                    |  | 20  | 22  | 24  | 26 | 28 | 30 | 32 | 34      | 36      |
|                |                                    |  | 759   | 600 | 6   | 6  | 0  | 0  | 0  | 0       | 0       |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 1995**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

| Date of Outage | Description of Outage | Total Number of Customers Out of Service | Customers Interrupted - Hours Into the Event Day for Jan. 4-6 Storm* |        |        |        |        |        |        |        |        |
|----------------|-----------------------|--|--|--------|--------|--------|--------|--------|--------|--------|--------|
|                |                       |  | 2  | 4      | 6      | 8      | 10     | 12     | 14     | 16     | 18     |
| Jan. 4-6       | Storm/winds           | 166,940                                  | 0  | 0      | 55     | 55     | 0      | 55     | 2,719  | 14,554 | 61,661 |
|                |                       |  | Customers Interrupted - Hours Into the Event Day (continued)         |        |        |        |        |        |        |        |        |
|                |                       |  | 20   | 22     | 24     | 26     | 28     | 30     | 32     | 34     | 36     |
|                |                       |  | 68,596   | 45,355 | 36,717 | 33,323 | 24,191 | 15,336 | 15,341 | 15,465 | 14,288 |
|                |                       |  | Customers Interrupted - Hours Into the Event Day (continued)         |        |        |        |        |        |        |        |        |
|                |                       |  | 38   | 40     | 42     | 44     | 46     | 48     | 50     | 52     | 54     |
|                |                       |  | 13,589   | 5,425  | 5,095  | 5,749  | 4,237  | 4,022  | 3,165  | 2,810  | 326    |
|                |                       |  | Customers Interrupted - Hours Into the Event Day (continued)         |        |        |        |        |        |        |        |        |
|                |                       |  | 56   | 58     | 60     | 62     | 64     | 66     | 68     | 70     | 72     |
|                |                       |  | 229  | 135    | 135    | 50     | 50     | 110    | 135    | 25     | 25     |

\*Customers reflected in the time increments include all customers experiencing outages at that point in time. The event day begins at midnight.

**EXCLUDABLE CPUC MAJOR EVENT DETAILS FOR 1994**

**EXTRACTED FROM THE TEN LARGEST OUTAGE EVENTS**

There were no CPUC Major Events from 1994.

**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 2003**

| Month     | District  | Circuit | Number of Customers Experiencing >12 Sustained Outages |
|-----------|-----------|---------|--|
| January   | Northeast | 212     | 62   |
| February  | Northeast | 212     | 60   |
| March     | Northeast | 212     | 60   |
| April     | Northeast | 212     | 60   |
| May       | Northeast | 212     | 60   |
| June      | Northeast | 212     | 60   |
| July      | Northeast | 212     | 60   |
| August    | Northeast | 212     | 62   |
| September | Northeast | 212     | 62   |
| October   | Northeast | 212     | 60   |
| November  | Northeast | 212     | 60   |
| December  | N/A       | N/A     | None   |

Data is based upon station outages as reported through SDG&E's Outage Management System.

**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 2002**

| Month     | District | Circuit | Number of Customers Experiencing >12 Sustained Outages |
|-----------|----------|---------|--|
| January   | N/A      | N/A     | None   |
| February  | N/A      | N/A     | None   |
| March     | N/A      | N/A     | None   |
| April     | N/A      | N/A     | None   |
| May       | N/A      | N/A     | None   |
| June      | N/A      | N/A     | None   |
| July      | N/A      | N/A     | None   |
| August    | N/A      | N/A     | None   |
| September | N/A      | N/A     | None   |
| October   | N/A      | N/A     | None   |
| November  | N/A      | N/A     | None   |
| December  | N/A      | N/A     | None   |

Data is based upon station outages as reported through SDG&E's Outage Management System.

**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 2001**

| Month     | District | Circuit | Number of Customers Experiencing >12 Sustained Outages |
|-----------|----------|---------|--|
| January   | N/A      | N/A     | None   |
| February  | N/A      | N/A     | None   |
| March     | N/A      | N/A     | None   |
| April     | N/A      | N/A     | None   |
| May       | N/A      | N/A     | None   |
| June      | N/A      | N/A     | None   |
| July      | N/A      | N/A     | None   |
| August    | N/A      | N/A     | None   |
| September | N/A      | N/A     | None   |
| October   | N/A      | N/A     | None   |
| November  | N/A      | N/A     | None   |
| December  | N/A      | N/A     | None   |

Data is based upon station outages as reported through SDG&E's Outage Management System.



**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 2000**

| Month     | District | Circuit | Number of Customers Experiencing >12 Sustained Outages |
|-----------|----------|---------|--|
| January   | N/A      | N/A     | None   |
| February  | N/A      | N/A     | None   |
| March     | N/A      | N/A     | None   |
| April     | N/A      | N/A     | None   |
| May       | N/A      | N/A     | None   |
| June      | N/A      | N/A     | None   |
| July      | N/A      | N/A     | None   |
| August    | N/A      | N/A     | None   |
| September | N/A      | N/A     | None   |
| October   | N/A      | N/A     | None   |
| November  | N/A      | N/A     | None   |
| December  | N/A      | N/A     | None   |

Data is based upon station outages as reported through SDG&E's Outage Management System.

**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 1999**

| Month     | District  | Circuit | Number of Customers Experiencing >12 Sustained Outages |
|-----------|-----------|---------|--|
| January   | Northeast | 296     | 101  |
| February  | N/A       | N/A     | None   |
| March     | Northeast | 221     | 111  |
| April     | Northeast | 221     | 112  |
| May       | Northeast | 221     | 112  |
| June      | Northeast | 221     | 112  |
| July      | Northeast | 221     | 112  |
| August    | Northeast | 221     | 112  |
| September | Northeast | 221     | 112  |
| October   | N/A       | N/A     | None   |
| November  | N/A       | N/A     | None   |
| December  | N/A       | N/A     | None   |

Data is based upon station outages as reported through SDG&E's Outage Management System.

**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 1998**

| Month     | District  | Circuit | Number of Customers Experiencing >12 Sustained Outages |
|-----------|-----------|---------|--|
| January   | N/A       | N/A     | None   |
| February  | N/A       | N/A     | None   |
| March     | N/A       | N/A     | None   |
| April     | N/A       | N/A     | None   |
| May       | N/A       | N/A     | None   |
| June      | N/A       | N/A     | None   |
| July      | N/A       | N/A     | None   |
| August    | N/A       | N/A     | None   |
| September | Northeast | 296     | 457  |
| October   | Northeast | 296     | 64   |
| November  | N/A       | N/A     | None   |
| December  | N/A       | N/A     | None   |

Data is based upon station outages as reported through SDG&E's Outage Management System.

**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 1997**

| Month     | District      | Circuit | Number of Customers Experiencing >12 Sustained Outages |
|-----------|---------------|---------|--|
| January   | Northeast     | CTL1    | 184  |
| February  | N/A           | N/A     | None   |
| March     | N/A           | N/A     | None   |
| April     | N/A           | N/A     | None   |
| May       | N/A           | N/A     | None   |
| June      | N/A           | N/A     | None   |
| July      | N/A           | N/A     | None   |
| August    | N/A           | N/A     | None   |
| September | Orange County | 766     | 545  |
| October   | Orange County | 766     | 545  |
| November  | N/A           | N/A     | None   |
| December  | N/A           | N/A     | None   |

Data is based upon station outages as reported through SDG&E's Outage Management System.

**CUSTOMERS EXPERIENCING MORE THAN 12 SUSTAINED OUTAGES IN A ROLLING 12-MONTH PERIOD (EXCLUDING CPUC MAJOR EVENTS) FOR 1994 THROUGH 1996**

| <b>Year</b> | <b>District</b> | <b>Circuit Number</b> | <b>Number of Customers Experiencing &gt;12 Sustained Outages</b> |
|-------------|-----------------|-----------------------|--|
| 1994        | N/A             | N/A                   | None   |
| 1995        | N/A             | N/A                   | None   |
| 1996        | N/A             | N/A                   | None   |

Data for 1994 is based on complete circuit outages due to historical data limitations.

Data for 1995-1996 is based upon station outages as reported through SDG&E's Outage Management System.