

## OE-417 Electric Emergency and Disturbance (OE-417) Events, 2012<sup>1</sup>

| Date Event Began | Time Event Began | Date of Restoration | Time of Restoration | Area Affected                                  | NERC Region | Event Type                               | Demand Loss (MW) | Number of Customers Affected |
|------------------|------------------|---------------------|---------------------|--|-------------|--|------------------|------------------------------|
| <b>January</b>   |                  |                     |                     |  |             |  |                  |                              |
| 1/4/2012         | 12:14 PM         | 1/4/2012            | 12:14 PM            | Tacoma, Washington                             | WECC        | Suspected physical attack                | N/A              | N/A                          |
| 1/5/2012         | 10:35 AM         | 1/5/2012            | 12:25 PM            | CSWS/AEP West territory, Oklahoma              | SPP         | Sabotage                                 | 0                | 0                            |
| 1/5/2012         | 10:28 AM         | 1/5/2012            | 12:25 PM            | Creek County, Oklahoma                         | SPP         | Suspected physical attack                | N/A              | N/A                          |
| 1/9/2012         | 2:30 PM          | 1/9/2012            | 3:30 PM             | Watertown, Connecticut                         | NPCC        | Vandalism                                | N/A              | N/A                          |
| 1/9/2012         | 1:36 PM          | 1/11/2012           | 1:05 AM             | Louisiana                                      | SERC        | Load Shed                                | 150              | 1                            |
| 1/10/2012        | 9:30 PM          | 1/10/2012           | 9:30 PM             | Rusk County, Texas                             | TRE         | Load Shed                                | N/A              | N/A                          |
| 1/11/2012        | 7:19 AM          | 1/11/2012           | 9:07 AM             | Nevada   | WECC        | Suspected Physical Attack                | 0                | 0                            |
| 1/12/2012        | 8:26 AM          | 1/12/2012           | 8:26 AM             | Newark, Delaware                               | RFC         | Physical Attack                          | 0                | 0                            |
| 1/13/2012        | 9:20 AM          | 1/13/2012           | 9:20 AM             | Newark, Delaware                               | RFC         | Physical Attack                          | 0                | 0                            |
| 1/15/2012        | 9:35 AM          | 1/15/2012           | 9:35 AM             | Tacoma, Washington                             | WECC        | Vandalism                                | N/A              | N/A                          |
| 1/17/2012        | 10:31 AM         | 1/17/2012           | 5:21 PM             | Austin, Texas                                  | TRE         | Suspected Cyber Attack                   | N/A              | 0                            |
| 1/19/2012        | 7:00 AM          | 1/20/2012           | 3:00 PM             | King, Pierce and Thurston Counties, Washington | WECC        | Severe Weather - Winter Storm            | 1,600            | 426,000                      |
| 1/24/2012        | 11:22 AM         | 1/24/2012           | 11:22 AM            | Tacoma, Washington                             | WECC        | Vandalism                                | N/A              | N/A                          |
| 1/27/2012        | 9:40 AM          | 1/27/2012           | 9:40 AM             | Frederickson Substation, Spanaway, Washington  | WECC        | Vandalism                                | N/A              | N/A                          |
| 1/29/2012        | 12:45 PM         | 1/29/2012           | 12:45 PM            | Roosevelt Substation, Tacoma, Washington       | WECC        | Vandalism                                | N/A              | N/A                          |
| <b>February</b>  |                  |                     |                     |  |             |  |                  |                              |
| 2/11/2012        | 8:47 AM          | 2/11/2012           | 10:30 AM            | Lamar, Colorado                                | WECC        | Suspected Physical Attack                | 0                | 0                            |
| 2/11/2012        | 8:55 AM          | 2/11/2012           | 8:55 AM             | Tacoma, Washington                             | WECC        | Suspected Physical Attack                | N/A              | N/A                          |
| 2/13/2012        | 7:02 AM          | 2/13/2012           | 4:25 PM             | Asheville, North Carolina                      | SERC        | Suspected Physical Attack                | N/A              | N/A                          |
| 2/14/2012        | 7:20 PM          | 2/15/2012           | 4:00 PM             | Tacoma, Washington                             | WECC        | Suspected Physical Attack                | N/A              | N/A                          |
| 2/15/2012        | 5:33 AM          | 2/15/2012           | 5:30 PM             | Port Orchard, Washington                       | WECC        | Suspected Physical Attack                | 0                | 0                            |
| 2/17/2012        | 3:00 AM          | 2/17/2012           | 11:33 AM            | Little Rock, Arkansas                          | SERC        | Suspected Cyber Attack                   | UNK              | UNK                          |
| 2/19/2012        | 5:00 PM          | 2/21/2012           | 7:33 AM             | Kentucky, Virginia, West Virginia              | SERC        | Severe Weather - Winter Storm            | UNK              | 90,000                       |
| 2/23/2012        | 5:45 AM          | 2/23/2012           | 3:02 PM             | South East College Station, Texas              | TRE         | Suspected Physical Attack                | 0                | 0                            |
| 2/23/2012        | 11:12 PM         | 2/24/2012           | 1:00 AM             | Londonderry, New Hampshire                     | NPCC        | Suspected Physical Attack                | 0                | 0                            |
| 2/24/2012        | 11:24 AM         | 2/24/2012           | 11:49 AM            | Spanaway, Washington                           | WECC        | Suspected Physical Attack                | N/A              | N/A                          |
| 2/28/2012        | 2:59 AM          | 2/28/2012           | 6:12 AM             | Sacramento, California                         | WECC        | Electrical System Separation (Islanding) | 1                | 1                            |
| 2/28/2012        | 7:00 AM          | 2/28/2012           | 7:00 AM             | Coos County Oregon                             | WECC        | Suspected Physical Attack                | UNK              | UNK                          |

| Date Event Began | Time Event Began | Date of Restoration | Time of Restoration | Area Affected                         | NERC Region | Event Type                                | Demand Loss (MW) | Number of Customers Affected |
|------------------|------------------|---------------------|---------------------|---------------------------------------|-------------|---|------------------|------------------------------|
| <b>March</b>     |                  |                     |                     |                                       |             |   |                  |                              |
| 3/2/2012         | 12:37 PM         | 3/5/2012            | 12:01 PM            | Northern Alabama; Southeast Tennessee | SERC        | Severe Weather - Tornadoes                | 500              | UNK                          |
| 3/2/2012         | 1:45 PM          | 3/2/2012            | 3:30 PM             | Piggott, Arkansas                     | SERC        | Operational Failure/Equipment Malfunction | N/A              | N/A                          |
| 3/2/2012         | 9:00 PM          | 3/5/2012            | 4:30 PM             | Southeastern, Michigan                | RFC         | Severe Weather - Winter Storm             | 371              | 130,000                      |
| 3/2/2012         | 9:00 PM          | 3/4/2012            | 5:30 PM             | Lower Peninsula, Michigan             | RFC         | Severe Weather - Winter Storm             | 50               | 140,000                      |
| 3/4/2012         | 1:27 AM          | 3/4/2012            | 6:58 AM             | Prince Georges County, Maryland       | RFC         | Suspected Physical Attack                 | N/A              | N/A                          |
| 3/4/2012         | 1:38 PM          | 3/5/2012            | 11:00 AM            | Texas                                 | SERC        | Suspected Physical Attack                 | UNK              | UNK                          |
| 3/16/2012        | 4:00 PM          | 3/16/2012           | 4:00 PM             | New Castle, Delaware                  | RFC         | Suspected Physical Attack                 | 0                | 0                            |
| 3/20/2012        | 8:00 AM          | 3/20/2012           | 1:00 PM             | Houston, Texas                        | TRE         | Severe Weather - Thunderstorms            | N/A              | 96,000                       |
| 3/23/2012        | 7:34 PM          | 3/23/2012           | 7:34 PM             | Newark, Delaware                      | RFC         | Suspected Physical Attack                 | 0                | 0                            |
| 3/26/2012        | 1:24 PM          | 3/26/2012           | 1:24 PM             | Tacoma, Washington                    | WECC        | Suspected Physical Attack                 | N/A              | N/A                          |
| 3/28/2012        | 10:17 AM         | 3/28/2012           | 10:17 AM            | Graham, Washington                    | WECC        | Suspected Physical Attack                 | N/A              | N/A                          |
| 3/29/2012        | 12:01 PM         | 3/29/2012           | 12:02 PM            | Lansing, Michigan                     | RFC         | Electrical System Separation (Islanding)  | UNK              | 0                            |
| 3/30/2012        | 11:10 AM         | 3/30/2012           | 11:30 AM            | Vermont                               | NPCC        | Suspected Physical Attack                 | N/A              | N/A                          |
| <b>April</b>     |                  |                     |                     |                                       |             |   |                  |                              |
| 4/1/2012         | 8:27 PM          | 4/3/2012            | 8:28 AM             | Council Bluffs, Iowa                  | MRO         | Vandalism                                 | 0                | 0                            |
| 4/3/2012         | 11:10 AM         | 4/3/2012            | 11:25 AM            | West Rutland, Vermont                 | NPCC        | Vandalism                                 | 0                | 0                            |
| 4/3/2012         | 3:33 PM          | 4/3/2012            | 8:25 PM             | Seattle, Washington                   | WECC        | Physical Attack                           | 0                | 0                            |
| 4/4/2012         | 3:32 PM          | 4/6/2012            | 3:30 PM             | WAPA-SNR Regional Office, California  | WECC        | Suspected Physical Attack                 | N/A              | N/A                          |
| 4/7/2012         | 2:35 PM          | 4/7/2012            | 2:36 PM             | Newark, Delaware                      | RFC         | Physical Attack                           | 0                | 0                            |
| 4/7/2012         | 12:25 PM         | 4/7/2012            | 12:26 PM            | Newark, Delaware                      | RFC         | Physical Attack                           | 0                | 0                            |
| 4/7/2012         | 9:31 AM          | 4/7/2012            | 9:32 AM             | Newark, Delaware                      | RFC         | Physical Attack                           | 0                | 0                            |
| 4/11/2012        | 9:00 AM          | 4/11/2012           | 9:00 AM             | North Attleboro, Massachusetts        | NPCC        | Vandalism                                 | 0                | 0                            |
| 4/12/2012        | 8:08 AM          | 4/12/2012           | 4:30 PM             | Tacoma, Washington                    | WECC        | Suspected Physical Attack                 | N/A              | N/A                          |
| 4/15/2012        | 7:38 PM          | 4/15/2012           | 9:26 PM             | Georgia                               | SERC        | Suspected Physical Attack                 | UNK              | UNK                          |
| 4/16/2012        | 3:46 PM          | 4/19/2012           | 2:00 AM             | Southeast, Michigan                   | RFC         | Severe Weather - High Winds               | 218              | 111,393                      |
| 4/17/2012        | 6:11 AM          | 4/17/2012           | 5:48 PM             | San Diego County, California          | WECC        | Suspected Physical Attack                 | 0                | 0                            |
| 4/19/2012        | 7:53 AM          | 4/19/2012           | 4:00 PM             | Tacoma, Washington                    | WECC        | Suspected Physical Attack                 | N/A              | N/A                          |
| 4/20/2012        | 2:27 PM          | 4/21/2012           | 4:27 AM             | Metropolitan Houston, Texas           | TRE         | Severe Weather - Thunderstorms            | N/A              | 120,377                      |
| 4/21/2012        | 3:02 PM          | 4/21/2012           | 8:09 PM             | East Bridgewater, Massachusetts       | NPCC        | Physical Attack                           | N/A              | N/A                          |

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|------------------------|------------------|---------------------|---------------------|--|-------------|--|------------------|------------------------------|
| <b>April Continued</b> |                  |                     |                     |  |             |  |                  |                              |
| 4/21/2012              | 8:55 PM          | 4/23/2012           | 4:30 PM             | Tacoma, Washington                           | WECC        | Suspected Physical Attack                  | N/A              | N/A                          |
| 4/23/2012              | 8:11 AM          | 4/23/2012           | 12:47 PM            | Northwest Indiana                            | RFC         | Suspected Physical Attack                  | N/A              | N/A                          |
| 4/23/2012              | 11:56 AM         | 4/23/2012           | 3:35 PM             | Snohomish County, Washington                 | WECC        | Suspected Physical Attack                  | N/A              | N/A                          |
| <b>May</b>             |                  |                     |                     |  |             |  |                  |                              |
| 5/7/2012               | 12:50 PM         | 5/7/2012            | 2:00 PM             | Williston, Vermont                           | NPCC        | Vandalism                                  | 0                | 0                            |
| 5/7/2012               | 5:45 PM          | 5/7/2012            | 6:06 PM             | Eastern Ohio                                 | RFC         | Load Shed/Severe Weather - Lightning Storm | 420              | 1                            |
| 5/11/2012              | 11:05 AM         | 5/11/2012           | 11:20 AM            | Lakewood, Washington                         | WECC        | Vandalism                                  | N/A              | N/A                          |
| 5/24/2012              | 3:20 PM          | 5/25/2012           | 5:29 PM             | Tyngsborough, Massachusetts                  | NPCC        | Physical Attack                            | UNK              | UNK                          |
| 5/29/2012              | 6:30 PM          | 5/29/2012           | 7:40 PM             | Alder Dam, Pierce County, Washington         | WECC        | Physical Attack                            | N/A              | N/A                          |
| 5/29/2012              | 8:35 PM          | 5/31/2012           | 10:00 AM            | Oklahoma City Metro Area, Oklahoma           | SPP         | Severe Weather - Thunderstorms             | UNK              | 112,000                      |
| 5/31/2012              | 11:45 PM         | 6/1/2012            | 4:30 AM             | Columbus, Ohio                               | RFC         | Physical Attack                            | 0                | 0                            |
| <b>June</b>            |                  |                     |                     |  |             |  |                  |                              |
| 6/2/2012               | 7:30 AM          | 6/2/2012            | 11:35 AM            | San Francisco, California                    | WECC        | Vandalism                                  | N/A              | N/A                          |
| 6/6/2012               | 8:00 AM          | 6/6/2012            | 8:00 AM             | Delhi, New York                              | NPCC        | Vandalism                                  | N/A              | N/A                          |
| 6/6/2012               | 12:37 PM         | 6/6/2012            | 12:37 PM            | Columbia Heights, NW, Washington DC          | RFC         | Vandalism                                  | 0                | 0                            |
| 6/8/2012               | 5:20 PM          | 6/8/2012            | 5:25 PM             | Denver Metro Area, Colorado                  | WECC        | Load Shed                                  | 120              | 30,379                       |
| 6/11/2012              | 7:50 PM          | 6/12/2012           | 3:00 PM             | North/Central Alabama; North/Central Georgia | SERC        | Severe Weather - Thunderstorms             | 368              | 110,591                      |
| 6/12/2012              | 3:57 PM          | 6/14/2012           | 4:57 AM             | Houston, Texas                               | TRE         | Severe Weather - Thunderstorms             | 920              | 175,000                      |
| 6/13/2012              | 4:55 PM          | 6/13/2012           | 10:09 PM            | San Juan County, New Mexico                  | WECC        | Vandalism                                  | 0                | 0                            |
| 6/19/2012              | 4:30 AM          | 6/20/2012           | 11:00 PM            | Minneapolis/St. Paul, Minnesota              | MRO         | Severe Weather - Thunderstorms             | UNK              | 68,200                       |
| 6/19/2012              | 5:30 AM          | 6/21/2012           | 5:30 AM             | CAISO Territory California                   | WECC        | Fuel Supply Deficiency (Water)             | UNK              | UNK                          |
| 6/23/2012              | 6:57 PM          | 6/23/2012           | 7:28 PM             | North Shore, Massachusetts                   | NPCC        | Load Shed                                  | 51               | 29,250                       |
| 6/25/2012              | 4:04 PM          | 6/26/2012           | 1:45 PM             | Central Virginia                             | SERC        | Severe Weather - Wind & Rain               | 600              | 190,000                      |
| 6/29/2012              | 10:45 AM         | 6/29/2012           | 10:45 AM            | New Castle, Delaware                         | RFC         | Physical Attack                            | 0                | 0                            |
| 6/29/2012              | 12:10 PM         | 6/29/2012           | 5:02 PM             | Puerto Rico                                  | N/A         | Equipment Trip & Failure                   | 1,800            | 900,000                      |
| 6/29/2012              | 2:10 PM          | 7/4/2012            | 6:00 PM             | Dayton, Ohio                                 | RFC         | Severe Weather - Thunderstorms             | 500              | 175,000                      |
| 6/29/2012              | 4:00 PM          | 7/2/2012            | 4:00 PM             | Indiana; Michigan; Ohio; West Virginia       | RFC         | Severe Weather - Thunderstorms             | UNK              | 1,355,919                    |

| Date Event Began      | Time Event Began | Date of Restoration | Time of Restoration | Area Affected  | NERC Region | Event Type                                | Demand Loss (MW) | Number of Customers Affected |
|-----------------------|------------------|---------------------|---------------------|--|-------------|---|------------------|------------------------------|
| <b>June Continued</b> |                  |                     |                     |  |             |   |                  |                              |
| 6/29/2012             | 4:00 PM          | 6/29/2012           | 9:00 PM             | Eastern, Arkansas  | SERC        | Public Appeal to Reduce Electricity Usage | 45               | 7,935                        |
| 6/29/2012             | 5:15 PM          | 7/2/2012            | 11:59 PM            | Eastern Indiana; Northern Kentucky; Greater Cincinnati area Ohio       | RFC         | Severe Weather - Thunderstorms            | 2,946            | 4,645,572                    |
| 6/29/2012             | 6:24 PM          | 7/6/2012            | 10:00 AM            | West Virginia  | RFC         | Severe Weather - Thunderstorms            | 700              | 265,000                      |
| 6/29/2012             | 7:00 PM          | 7/7/2012            | 7:43 PM             | Maryland; West Virginia  | RFC         | Severe Weather - Thunderstorms            | UNK              | 145,000                      |
| 6/29/2012             | 10:15 PM         | 7/5/2012            | 12:52 PM            | Montgomery and Prince Georges Counties, Maryland; District of Columbia | RFC         | Severe Weather - Thunderstorms            | 3,000            | 425,000                      |
| 6/29/2012             | 10:29 PM         | 7/4/2012            | 3:36 PM             | Virginia   | SERC        | Severe Weather - Thunderstorms            | 5,000            | 880,000                      |
| 6/29/2012             | 10:43 PM         | 7/5/2012            | 11:50 AM            | Greater Baltimore area, Maryland                                       | RFC         | Severe Weather - Thunderstorms            | 1,465            | 600,000                      |
| 6/29/2012             | 11:30 PM         | 6/30/2012           | 2:00 AM             | Northeast Illinois   | RFC         | Severe Weather - Thunderstorms            | UNK              | 109,000                      |
| 6/30/2012             | 1:00 AM          | 7/3/2012            | 1:00 AM             | Delaware; Maryland   | RFC         | Severe Weather - Thunderstorms            | 0                | 86,390                       |
| 6/30/2012             | 1:15 AM          | 7/7/2012            | 5:33 PM             | Atlantic City Electric Service Territory New Jersey                    | RFC         | Severe Weather - Thunderstorms            | UNK              | 205,000                      |
| 6/30/2012             | 3:00 PM          | 7/2/2012            | 12:00 PM            | Northeast Tennessee  | SERC        | Public Appeal to Reduce Electricity Usage | UNK              | UNK                          |
| 6/30/2012             | 10:30 PM         | 7/2/2012            | 8:11 AM             | Calvert, Charles, St. Mary's, Prince Georges Counties Maryland         | RFC         | Severe Weather - Thunderstorms            | 354              | 60,000                       |
| <b>July</b>           |                  |                     |                     |  |             |   |                  |                              |
| 7/1/2012              | 1:00 PM          | 7/3/2012            | 3:00 PM             | Illinois   | RFC         | Severe Weather - Thunderstorms            | Unknown          | 320,000                      |
| 7/1/2012              | 4:47 PM          | 7/1/2012            | 11:00 PM            | Tarboro, North Carolina  | SERC        | Operational Failure; Storm Damage         | 48               | 6,100                        |
| 7/1/2012              | 5:45 PM          | 7/1/2012            | 10:15 PM            | Northern, Central and Eastern North Carolina                           | SERC        | Severe Weather                            | Unknown          | 69,106                       |
| 7/5/2012              | 12:00 AM         | 7/6/2012            | 8:30 PM             | Lower Peninsula Michigan   | RFC         | Severe Weather - Thunderstorms            | Unknown          | 111,000                      |
| 7/5/2012              | 7:00 PM          | 7/6/2012            | 4:00 PM             | Northeast Tennessee  | SERC        | Severe Weather - Wind & Storms            | N/A              | 50,001                       |
| 7/6/2012              | 3:05 PM          | 7/6/2012            | 3:06 PM             | Tacoma, Washington   | WECC        | Vandalism                                 | N/A              | N/A                          |
| 7/7/2012              | 4:00 AM          | 7/10/2012           | 4:00 AM             | CAISO California   | WECC        | Fuel Supply Deficiency (Water)            | Unknown          | 0                            |
| 7/7/2012              | 6:06 AM          | 7/9/2012            | 11:00 PM            | Lower Valley, Central, Susquehanna Regions Pennsylvania                | RFC         | Severe Weather - Thunderstorms            | N/A              | 64,500                       |
| 7/7/2012              | 6:00 PM          | 7/9/2012            | 7:01 PM             | Central and Northern New Jersey  | RFC         | Severe Weather - Thunderstorms            | N/A              | 95,400                       |
| 7/9/2012              | 12:15 PM         | 7/9/2012            | 4:14 PM             | Alberta, Canada  | WECC        | Energy Deficiency Alert                   | 9896             | Unknown                      |
| 7/16/2012             | 11:27 AM         | 7/16/2012           | 12:29 PM            | Little Rock, Arkansas  | SPP         | Public Appeal to Reduce Energy Usage      | N/A              | N/A                          |
| 7/18/2012             | 2:16 PM          | 7/19/2012           | 11:58 PM            | Southeast Ohio, Northern Kentucky, Southern Indiana                    | RFC         | Severe Weather - Thunderstorms            | 480              | 103,000                      |
| 7/18/2012             | 4:20 PM          | 7/18/2012           | 7:05 PM             | Eastern Ohio   | RFC         | Severe Weather - Thunderstorms            | Unknown          | 67,000                       |
| 7/18/2012             | 11:00 PM         | 7/19/2012           | 6:00 AM             | Northern Illinois  | RFC         | Severe Weather - Thunderstorms            | Unknown          | 181,000                      |

| Date Event Began      | Time Event Began | Date of Restoration | Time of Restoration | Area Affected                                | NERC Region | Event Type                                   | Demand Loss (MW) | Number of Customers Affected |
|-----------------------|------------------|---------------------|---------------------|--|-------------|--|------------------|------------------------------|
| <b>July Continued</b> |                  |                     |                     |  |             |  |                  |                              |
| 7/19/2012             | 10:30 AM         | 7/31/2012           | 11:00 AM            | Niagara County, New York                     | NPCC        | Fuel Supply Deficiency (Coal)                | 675              | Unknown                      |
| 7/19/2012             | 12:32 PM         | 7/19/2012           | 12:33 PM            | Newark, Delaware                             | RFC         | Vandalism                                    | N/A              | N/A                          |
| 7/21/2012             | 2:19 AM          | 7/21/2012           | 5:20 AM             | City of Lubbock, Texas                       | SPP         | Severe Weather; Equipment Failure            | 220              | 70,000                       |
| 7/24/2012             | 7:01 AM          | 7/24/2012           | 4:30 PM             | Northern Indiana                             | RFC         | Severe Weather - Thunderstorms               | N/A              | 82,621                       |
| 7/24/2012             | 7:30 AM          | 7/24/2012           | 10:00 PM            | Northern Illinois                            | RFC         | Severe Weather - Thunderstorms               | Unknown          | 330,000                      |
| 7/26/2012             | 6:14 PM          | 7/27/2012           | 6:14 PM             | Western Pennsylvania                         | RFC         | Severe Weather - Thunderstorms               | N/A              | 65,112                       |
| 7/26/2012             | 6:21 PM          | 7/28/2012           | 11:30 PM            | North/Central Pennsylvania                   | RFC         | Severe Weather - Thunderstorms               | N/A              | 65,000                       |
| 7/26/2012             | 6:30 PM          | 7/27/2012           | 5:22 PM             | Eastern Ohio                                 | RFC         | Severe Weather - Thunderstorms               | Unknown          | 57,054                       |
| 7/27/2012             | 5:19 PM          | 7/28/2012           | 5:19 PM             | Central Indiana                              | RFC         | Severe Weather - Thunderstorms               | Unknown          | 52,702                       |
| <b>August</b>         |                  |                     |                     |  |             |  |                  |                              |
| 8/1/2012              | 12:00 PM         | 8/1/2012            | 12:00 PM            | Oklahoma, Arkansas                           | SPP         | Public Appeal to Reduce Electricity Usage    | Unknown          | Unknown                      |
| 8/4/2012              | 3:55 AM          | 8/4/2012            | 4:21 AM             | Tembler Substation in McKittrick, California | WECC        | Electrical System Separation (Islanding)     | 5                | 127                          |
| 8/4/2012              | 4:00 AM          | 8/4/2012            | 7:20 AM             | Northern Indiana                             | RFC         | Severe Weather - Thunderstorms               | N/A              | 61,413                       |
| 8/4/2012              | 5:30 PM          | 8/5/2012            | 12:10 PM            | Northeast Illinois                           | RFC         | Severe Weather - Thunderstorms               | Unknown          | 325,000                      |
| 8/11/2012             | 12:45 PM         | 8/11/2012           | 5:00 PM             | Tacoma, Washington                           | WECC        | Suspected Physical Attack                    | N/A              | N/A                          |
| 8/13/2012             | 1:15 PM          | 8/13/2012           | 1:15 PM             | Knoxville, Tennessee                         | SERC        | Vandalism                                    | Unknown          | Unknown                      |
| 8/13/2012             | 3:52 PM          | 8/13/2012           | 7:44 PM             | CFE (Mexico & U.S.)                          | WECC        | Severe Weather - Dust Storm; Load Shed Event | 655              | Unknown                      |
| 8/16/2012             | 1:13 PM          | 8/16/2012           | 1:13 PM             | Northern Indiana                             | RFC         | Vandalism                                    | 0                | 0                            |
| 8/19/2012             | 8:42 AM          | 8/19/2012           | 12:08 PM            | El Paso, Texas                               | WECC        | Suspected Physical Attack                    | 12               | 3,314                        |
| 8/26/2012             | 10:04 PM         | 8/27/2012           | 2:04 AM             | Florida                                      | FRCC        | Severe Weather - TS Isaac                    | N/A              | 440,000                      |
| 8/28/2012             | 6:00 AM          | 9/4/2012            | 8:00 AM             | Arkansas, Louisiana, Mississippi             | SERC        | Severe Weather - Hurricane Isaac             | Unknown          | 770,000                      |
| 8/29/2012             | 6:53 AM          | 8/30/2012           | 2:00 PM             | Louisiana                                    | SERC        | Severe Weather - Hurricane Isaac             | 150              | 68,018                       |
| 8/29/2012             | 9:00 AM          | 8/31/2012           | 12:00 PM            | Louisiana                                    | SERC        | Severe Weather - Hurricane Isaac             | 300              | 50,000                       |
| 8/29/2012             | 9:48 AM          | 8/31/2012           | 12:55 PM            | Louisiana                                    | SPP         | Severe Weather - Hurricane Isaac             | Unknown          | 95,000                       |
| <b>September</b>      |                  |                     |                     |  |             |  |                  |                              |
| 9/5/2012              | 10:56 AM         | 9/5/2012            | 11:27 AM            | Alberta, Canada                              | WECC        | Electrical System Separation (Islanding)     | 0                | 0                            |
| 9/6/2012              | 4:45 AM          | Ongoing             | Ongoing             | Oroville, California                         | WECC        | Fuel Supply Deficiency (Water)               | N/A              | N/A                          |
| 9/7/2012              | 9:30 PM          | 9/8/2012            | 1:00 AM             | Arkansas                                     | SERC        | Severe Weather - Thunderstorms               | UNK              | 64,951                       |

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|----------------------------|------------------|---------------------|---------------------|--|-------------|--|------------------|------------------------------|
| <b>September Continued</b> |                  |                     |                     |  |             |  |                  |                              |
| 9/8/2012                   | 3:40 PM          | 9/8/2012            | 6:45 PM             | Prince George's County, Montgomery County Maryland; D.C. | RFC         | Severe Weather - Thunderstorms           | UNK              | 65,000                       |
| 9/8/2012                   | 3:53 PM          | 9/9/2012            | 7:46 PM             | Virginia   | SERC        | Severe Weather - Thunderstorms           | 475              | 119,000                      |
| 9/11/2012                  | 1:00 PM          | 9/11/2012           | 1:58 PM             | Alberta, Canada  | WECC        | Electrical System Separation (Islanding) | 0                | 0                            |
| 9/24/2012                  | 12:00 AM         | 9/25/2012           | 12:00 AM            | Brighton, Maryland                                       | RFC         | Suspected Physical Attack                | 0                | 0                            |
| 9/26/2012                  | 9:16 PM          | 9/26/2012           | 10:18 PM            | Puerto Rico  | N/A         | Voltage Reduction                        | 600              | 371,526                      |
| <b>October</b>             |                  |                     |                     |  |             |  |                  |                              |
| 10/5/2012                  | 5:30 PM          | 10/5/2012           | 5:50 PM             | Greater Sacramento, California                           | WECC        | Suspected Physical Attack                | N/A              | N/A                          |
| 10/9/2012                  | 12:00 AM         | 10/9/2012           | 12:01 AM            | Seat Pleasant, Maryland                                  | RFC         | Vandalism                                | 0                | 0                            |
| 10/11/2012                 | 12:00 AM         | 10/11/2012          | 12:01 AM            | Seat Pleasant, Maryland                                  | RFC         | Vandalism                                | 0                | 0                            |
| 10/14/2012                 | 10:36 AM         | 10/14/2012          | 10:50 AM            | Northern California                                      | WECC        | Electrical System Separation (Islanding) | 3                | 2,035                        |
| 10/15/2012                 | 2:15 PM          | 10/15/2012          | 2:16 PM             | Southeast Vermont  | NPCC        | Vandalism; Theft                         | 0                | 0                            |
| 10/22/2012                 | 12:00 AM         | 10/22/2012          | 12:01 AM            | Norbeck, Maryland  | RFC         | Physical Attack; Vandalism               | 0                | 0                            |
| 10/23/2012                 | 9:10 AM          | 10/23/2012          | 9:16 AM             | Crawfordsville, Indiana                                  | RFC         | Transmission System Interruption         | 49               | 9,800                        |
| 10/24/2012                 | 12:00 AM         | 10/24/2012          | 12:01 AM            | Kingswood, Maryland                                      | RFC         | Physical Attack; Vandalism               | 0                | 0                            |
| 10/24/2012                 | 12:00 AM         | 10/24/2012          | 12:01 AM            | Brighton, Maryland                                       | RFC         | Suspected Physical Attack                | 0                | 0                            |
| 10/24/2012                 | 3:15 PM          | 10/24/2012          | 3:16 PM             | Frankford, Delaware                                      | RFC         | Physical Attack; Vandalism               | 0                | 0                            |
| 10/25/2012                 | 12:00 AM         | 10/25/2012          | 12:01 AM            | West Lanham, Maryland                                    | RFC         | Physical Attack; Vandalism               | N/A              | N/A                          |
| 10/25/2012                 | 2:39 PM          | 10/25/2012          | 6:00 PM             | Pueblo, Colorado   | WECC        | Physical Attack; Vandalism               | 0                | 0                            |
| 10/25/2012                 | 6:51 PM          | 10/25/2012          | 7:30 PM             | Newark, Delaware   | RFC         | Physical Attack; Vandalism               | 0                | 0                            |
| 10/29/2012                 | 12:00 AM         | 11/9/2012           | 11:59 PM            | West Virginia  | RFC         | Severe Weather - Hurricane Sandy         | 0                | 208,000                      |
| 10/29/2012                 | 8:00 AM          | 11/4/2012           | 11:00 PM            | New Jersey   | RFC         | Severe Weather - Hurricane Sandy         | Unknown          | Unknown                      |
| 10/29/2012                 | 9:00 AM          | 10/29/2012          | 9:01 AM             | LaGrande, Washington                                     | WECC        | Physical Attack; Vandalism               | 0                | 0                            |
| 10/29/2012                 | 9:00 AM          | 11/2/2012           | 6:00 PM             | Delaware, Maryland                                       | RFC         | Severe Weather - Hurricane Sandy         | Unknown          | 70,000                       |
| 10/29/2012                 | 12:00 PM         | 11/4/2012           | 11:00 PM            | New Jersey   | RFC         | Severe Weather - Hurricane Sandy         | Unknown          | 217,000                      |
| 10/29/2012                 | 1:00 PM          | 11/12/2012          | 2:00 PM             | Long Island, New York                                    | NPCC        | Severe Weather - Hurricane Sandy         | 0                | 632,816                      |
| 10/29/2012                 | 2:40 PM          | 10/30/2012          | 6:16 PM             | Boston, Southeast Massachusetts                          | NPCC        | Severe Weather - Hurricane Sandy         | Unknown          | 50,000                       |

| Date Event Began         | Time Event Began | Date of Restoration | Time of Restoration | Area Affected                      | NERC Region  | Event Type                       | Demand Loss (MW) | Number of Customers Affected |
|--------------------------|------------------|---------------------|---------------------|------------------------------------|--------------|----------------------------------|------------------|------------------------------|
| <b>October Continued</b> |                  |                     |                     |                                    |              |                                  |                  |                              |
| 10/29/2012               | 2:45 PM          | 11/1/2012           | 1:30 AM             | Eastern Massachusetts              | NPCC         | Severe Weather - Hurricane Sandy | Unknown          | 50,000                       |
| 10/29/2012               | 3:00 PM          | 10/29/2012          | 3:01 PM             | Las Vegas, Nevada                  | WECC         | Suspected Physical Attack        | N/A              | N/A                          |
| 10/29/2012               | 3:15 PM          | 11/4/2012           | 8:00 PM             | Connecticut, Western Massachusetts | NPCC         | Severe Weather - Hurricane Sandy | 0                | 649,075                      |
| 10/29/2012               | 4:00 PM          | 11/7/2012           | 11:48 PM            | Eastern Pennsylvania               | RFC          | Severe Weather - Hurricane Sandy | 0                | 270,000                      |
| 10/29/2012               | 4:00 PM          | 11/8/2012           | 5:08 PM             | Maryland; West Virginia            | RFC          | Severe Weather - Hurricane Sandy | Unknown          | 150,000                      |
| 10/29/2012               | 4:00 PM          | 11/5/2012           | 11:59 PM            | Greater Cleveland Ohio             | RFC          | Severe Weather - Hurricane Sandy | 0                | 346,000                      |
| 10/29/2012               | 4:01 PM          | 11/8/2012           | 7:00 PM             | Greater New York City, New York    | NPCC         | Severe Weather - Hurricane Sandy | 0                | 818,000                      |
| 10/29/2012               | 4:03 PM          | 11/6/2012           | 12:00 PM            | New Jersey                         | NPCC         | Severe Weather - Hurricane Sandy | Unknown          | 50,000                       |
| 10/29/2012               | 4:45 PM          | 10/31/2012          | 11:00 AM            | New Hampshire                      | NPCC         | Severe Weather - Hurricane Sandy | N/A              | 50,000                       |
| 10/29/2012               | 5:13 PM          | 10/31/2012          | 11:00 AM            | Greater Baltimore Maryland         | RFC          | Severe Weather - Hurricane Sandy | 0                | 219,000                      |
| 10/29/2012               | 5:30 PM          | 11/6/2012           | 12:00 AM            | Greater Philadelphia Pennsylvania  | RFC          | Severe Weather - Hurricane Sandy | Unknown          | 850,000                      |
| 10/29/2012               | 6:11 PM          | 11/4/2012           | 10:50 PM            | Central Pennsylvania               | RFC          | Severe Weather - Hurricane Sandy | Unknown          | 400,000                      |
| 10/29/2012               | 6:12 PM          | 10/30/2012          | 7:35 PM             | Virginia                           | RFC          | Severe Weather - Hurricane Sandy | 520              | 156,000                      |
| 10/29/2012               | 6:46 PM          | 11/3/2012           | 10:45 AM            | Southeast New York; New Jersey     | NPCC;<br>RFC | Severe Weather - Hurricane Sandy | Unknown          | 200,000                      |
| 10/29/2012               | 6:48 PM          | 11/4/2012           | 11:36 AM            | New York                           | NP           | Severe Weather - Hurricane Sandy | Unknown          | 371,000                      |
| 10/29/2012               | 7:00 PM          | 11/2/2012           | 5:00 AM             | Indiana; Kentucky; Michigan; Ohio  | RFC;<br>SERC | Severe Weather - Nor'easter      | Unknown          | 173,273                      |
| 10/29/2012               | 7:15 PM          | 10/30/2012          | 3:02 PM             | Southeast and Seacoast Maine       | NPCC         | Severe Weather - Hurricane Sandy | Unknown          | 50,000                       |
| 10/30/2012               | 12:00 AM         | 10/30/2012          | 12:02 AM            | Hyattsville, Maryland              | RFC          | Physical Attack; Vandalism       | 0                | 0                            |
| 10/30/2012               | 2:00 AM          | 11/1/2012           | 10:00 PM            | Greater Detroit Michigan           | RFC          | Severe Weather - Nor'easter      | Unknown          | 133,777                      |
| 10/30/2012               | 1:20 PM          | 10/30/2012          | 1:25 PM             | Fitzwilliam, New Hampshire         | NPCC         | Vandalism                        | 0                | 0                            |
| 10/30/2012               | 3:00 PM          | 10/30/2012          | 3:01 PM             | Pueblo, Colorado                   | WECC         | Physical Attack; Vandalism       | Unknown          | Unknown                      |
| <b>November</b>          |                  |                     |                     |                                    |              |                                  |                  |                              |
| 11/2/2012                | 9:30 AM          | 11/2/2012           | 12:10 PM            | Concord, Vermont                   | NPCC         | Physical Attack; Vandalism       | 0                | 0                            |
| 11/7/2012                | 2:21 PM          | 11/7/2012           | 2:48 PM             | New Hampshire                      | NPCC         | Physical Attack; Vandalism       | 0                | 0                            |
| 11/8/2012                | 9:34 AM          | 11/8/2012           | 9:35 AM             | Bishopville, Maryland              | RFC          | Physical Attack; Vandalism       | 0                | 0                            |
| 11/15/2012               | 5:38 AM          | 11/15/2012          | 5:39 AM             | Southeast Massachusetts            | NPCC         | Physical Attack; Vandalism       | 0                | 0                            |

| Date Event Began          | Time Event Began | Date of Restoration | Time of Restoration | Area Affected                           | NERC Region | Event Type                              | Demand Loss (MW) | Number of Customers Affected |
|---------------------------|------------------|---------------------|---------------------|---|-------------|---|------------------|------------------------------|
| <b>November Continued</b> |                  |                     |                     |   |             |   |                  |                              |
| 11/15/2012                | 9:09 PM          | 11/15/2012          | 9:26 PM             | Iowa; Michigan                          | MRO         | Suspected Cyber Attack                  | Unknown          | Unknown                      |
| 11/17/2012                | 10:00 AM         | 11/18/2012          | 10:00 AM            | Comanche Peak, Texas                    | TRE         | Fuel Supply Deficiency                  | 1,231            | 0                            |
| 11/21/2012                | 2:50 PM          | 11/21/2012          | 2:51 PM             | Bethany Beach, Delaware                 | RFC         | Physical Attack; Vandalism              | N/A              | N/A                          |
| 11/26/2012                | 12:37 PM         | 11/26/2012          | 12:38 PM            | Frankfort, Delaware                     | RFC         | Physical Attack; Vandalism              | 0                | 0                            |
| 11/26/2012                | 3:07 PM          | 11/26/2012          | 3:08 PM             | Georgetown, Delaware                    | RFC         | Physical Attack; Vandalism              | N/A              | N/A                          |
| 11/27/2012                | 1:07 PM          | 11/27/2012          | 1:40 PM             | New Hampshire                           | NPCC        | Physical Attack; Vandalism              | 0                | 0                            |
| <b>December</b>           |                  |                     |                     |   |             |   |                  |                              |
| 12/2/2012                 | 5:20 AM          | 12/4/2012           | 9:00 AM             | Northern California                     | WECC        | Severe Weather - Winter Storm           | 250              | 125,000                      |
| 12/3/2012                 | 12:02 PM         | 12/3/2012           | 12:30 PM            | Tacoma, Washington                      | WECC        | Suspected Physical Attack               | 0                | 0                            |
| 12/6/2012                 | 9:18 PM          | 12/6/2012           | 9:31 PM             | Greater San Jose, California            | WECC        | Load Shed                               | 390              | Unknown                      |
| 12/17/2012                | 6:55 AM          | 12/17/2012          | 7:00 AM             | Tacoma, Washington                      | WECC        | Suspected Physical Attack               | 0                | 0                            |
| 12/25/2012                | 12:45 AM         | 12/28/2012          | 4:15 PM             | Arkansas; Louisiana; Mississippi; Texas | SPP         | Severe Weather - Winter Storm           | Unknown          | 242,509                      |
| 12/25/2012                | 9:28 AM          | 12/26/2012          | 4:28 PM             | Houston, Texas                          | TRE         | Severe Weather - Cold Front, High Winds | 294              | 262,000                      |
| 12/26/2012                | 2:50 PM          | 12/26/2012          | 7:40 PM             | Stantonsburg, North Carolina            | SERC        | Severe Weather - Thunderstorm           | 3                | 1,200                        |
| 12/31/2012                | 2:21 PM          | 12/31/2012          | 4:30 PM             | North Carolina                          | SERC        | Transmission Interruption               | 40               | 12,000                       |

<sup>1</sup> Source: Submissions of all Electric Emergency Incident and Disturbance Reports (OE-417), <http://www.oe.netl.doe.gov/oe417.aspx>