

**Table B.2. Major Disturbances and Unusual Occurrences, Year-to-Date through December 2010**

<b>Date</b>	<b>Utility/Power Pool (NERC Region)</b>	<b>Time</b>	<b>Area Affected</b>	<b>Type of Disturbance</b>	<b>Loss (megawatts)</b>	<b>Number of Customers Affected <sup>1</sup></b>
<b>January</b>						
1/6/2010	Southwest Louisiana Electric Membership Corporation (SERC)	6:00 p.m.	Southwest Louisiana	Made Public Appeals	N/A	N/A
1/11/2010	Progress Energy Florida (FRCC/SERC)	3:45 a.m.	Northern and Central Florida	Interruptible Load Shed/Made Public Appeals	N/A	N/A
1/18/2010	Pacific Gas and Electric Company (WECC)	11:30 a.m.	Northern and Central California	Severe Storm	290	1,700,000
1/19/2010	California ISO (WECC)	7:30 a.m.	San Francisco	Severe Storm	300	30,000
1/19/2010	San Diego Gas & Electric Company (WECC)	2:30 p.m.	San Diego and Orange Counties	Severe Storm	2,650	50,000
1/20/2010	Los Angeles Department of Water and Power (WECC)	1:00 p.m.	City of Los Angeles, California	Severe Storm	N/A	147,223
1/28/2010	American Electric Power (SPP)	12:00 p.m.	Oklahoma	Ice Storm	N/A	68,705
<b>February</b>						
2/1/2010	Western Farmers Electric Cooperative (SPP)	2:32 p.m.	Oklahoma	Ice Storm/Electrical System Separation	30	0
2/5/2010	Atlantic City Electric (RFC)	3:00 p.m.	Southern NJ	Winter Storm	N/A	221,000
2/5/2010	Duke Energy Carolinas (SERC)	6:48 p.m.	North and South Carolina	Winter Storm	500	74,000
2/5/2010	Potomac Electric Power Co (RFC)	7:00 p.m.	District of Columbia, Prince Georges and Montgomery Co. MD	Winter Storm	N/A	97,651
2/5/2010	Duquesne Light Company (RFC)	10:30 p.m.	Southwestern Pennsylvania	Winter Storm	N/A	57,000
2/5/2010	American Electric Power (RFC)	11:30 p.m.	Indiana, Ohio, W. Virginia and Virginia	Winter Storm	N/A	102,225
2/6/2010	Dominion (SERC)	2:30 a.m.	Virginia, North Carolina	Winter Storm	600	104,736
2/6/2010	Delmarva Power & Light Company (RFC)	8:00 a.m.	Delmarva Peninsula	Winter Storm	N/A	58,491
2/9/2010	Exelon Corporation (RFC)	6:00 p.m.	Southeastern Pennsylvania	Winter Storm	N/A	223,000
2/11/2010	Oncor Electric Delivery Company (TRE)	12:00 p.m.	Dallas/Fort Worth and East Texas	Winter Storm	N/A	500,000

2/12/2010	American Electric Power (SPP)	5:00 a.m.	East Texas, Western Arkansas, Northern Louisiana	Winter Storm	N/A	52,999
2/14/2010	Allegheny Power (RFC)	10:00 a.m.	Western Pennsylvania and Northeast Central WV	Winter Storm	900	190,000
2/19/2010	California Department of Water Resources (WECC)	8:30 p.m.	San Joaquin Field Division/Bakersfield, CA	Firm System Load Shed	1,000	N/A
2/23/2010	Central Hudson Gas & Electric Corp (NPCC)	10:00 p.m.	Upstate New York	Winter Storm	N/A	150,000
2/25/2010	Orange and Rockland Utilities Inc	12:01 a.m.	Southeastern New York, Northern New Jersey	Winter Storm	N/A	65,000
2/25/2010	Consolidated Edison of NY (NPCC)	5:00 p.m.	New York City	Winter Storm	N/A	55,000
2/25/2010	ISO New England (NPCC)	11:53 p.m.	Southern Maine and New Hampshire	Winter Storm	510	509,606
<b>March</b>						
3/13/2010	Exelon Corporation/PECO (RFC)	1:00 a.m.	Southeastern Pennsylvania	High Winds and rain	N/A	177,528
3/13/2010	ISO New England (NPCC)	12:00 p.m.	Connecticut	High Winds and Rain	50	50,246
3/13/2010	Long Island Power Authority (NPCC)	3:00 p.m.	Long Island	High Winds and Rain	N/A	153,000
3/13/2010	Jersey Central Power and Light Company (RFC)	4:00 p.m.	Central New Jersey and Northern New Jersey	High Winds and Flooding	N/A	180,000
3/13/2010	Public Service Electric & Gas Company (RFC)	6:00 p.m.	Southern, Central and Northern New Jersey	High Winds and Rain	100	360,000
3/13/2010	Consolidated Edison of NY (NPCC)	6:00 p.m.	New York City and Westchester County	High Winds and Rain	N/A	173,000
3/31/2010	San Diego Gas & Electric Company (WECC)	11:59 p.m.	San Diego and Orange Counties	Shed Firm Load	324	290,000
3/31/2010	California Independent System Operator (WECC)	11:59 p.m.	San Diego	Shed Firm Load	324	N/A
<b>April</b>						
4/16/2010	Allegheny Power (RFC)	5:15 p.m.	Southwestern Pennsylvania	Severe Thunderstorms	15	120,000

**Table B.2. Major Disturbances and Unusual Occurrences, Year-to-Date through December 2010**

Date	Utility/Power Pool (NERC Region)	Time	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected <sup>1</sup>
4/21/2010	Dow Chemical Co (SERC)	3:05 p.m.	Iberville, Parish, Louisiana	Generator Tripped	N/A	N/A

4/27/2010	North Carolina Eastern Municipal Power Agency (SERC)	2:55 p.m.	Rocky Mount, NC	Transmission System Interruption	N/A	29,376
-----------	--	-----------	-----------------	----------------------------------	-----	--------

**May**

5/2/2010	Tennessee Valley Authority (SERC)	2:40 p.m.	Tennessee and Mississippi	Thunderstorms	N/A	50,500
5/18/2010	California Department of Water Resources (WECC)	8:15 a.m.	Central California	Breakers Tripped	318	N/A
5/26/2010	Allegheny Power (RFC, SERC)	11:45 a.m.	Maryland, Pennsylvania, West Virginia, Virginia	Made Public Appeal - System Drill	N/A	N/A

**June**

6/1/2010	Southern Indiana Gas and Electric Company (RFC)	10:03 p.m.	Southwestern Indiana	Firm Load Shed	500	1
6/2/2010	CPS Energy (TRE)	8:18 p.m.	San Antonio, TX	Severe Weather	N/A	126,000
6/6/2010	Pacific Gas and Electric (WECC)	4:45 a.m.	Northern California	Electric System Separation	3	2,650
6/7/2010	Public Service Company of Colorado (WECC)	6:29 p.m.	Denver Metropolitan Area	Firm Load Shed	300	31,000
6/8/2010	Centerpoint Energy (TRE)	11:00 a.m.	Southeastern Texas	Thunderstorms	N/A	79,741
6/9/2010	North Carolina Eastern Municipal Power Agency (SERC)	2:18 p.m.	Edenton, NC	Transmission System Interruption	N/A	4,196
6/16/2010	Orange and Rockland Utilities (NPCC)	11:11 a.m.	New York (Rockland and Orange Counties)	Voltage Reduction (System Test)	N/A	N/A
6/17/2010	Louisiana Energy and Power Authority (SPP)	8:30 a.m.	Morgan City, LA	Made Public Appeal	N/A	N/A
6/17/2010	Entergy (SERC)	9:30 a.m.	Southern Louisiana	Made Public Appeal	N/A	N/A
6/17/2010	Cleco Power LLC (SERC)	9:30 a.m.	Southern Louisiana	Made Public Appeal	N/A	N/A
6/17/2010	Southwest Louisiana Electric Membership Corporation (SPP)	9:30 a.m.	Southwestern Louisiana	Made Public Appeal	N/A	N/A
6/17/2010	Western Area Power Administration (MRO)	10:49 a.m.	Eastern Montana	Electrical System Separation	N/A	N/A
6/18/2010	Northern Indiana Public Service Company (RFC)	3:30 p.m.	Northwest Indiana	Thunderstorms	N/A	94,345
6/18/2010	Commonwealth Edison (RFC)	4:00 p.m.	Chicago, IL	Severe Weather	N/A	400,000
6/18/2010	Consumers Energy (RFC)	7:00 p.m.	Southern Portion of Lower Michigan	Thunderstorms	N/A	100,000
6/18/2010	American Electric Power (RFC)	8:00 p.m.	Indiana, Michigan	Severe Weather	N/A	79,000

6/18/2010	Detroit Edison (RFC)	8:00 p.m.	Detroit, MI	Severe Weather	N/A	150,000
6/21/2010	Duke Energy Midwest (RFC)	1:48 p.m.	Cincinnati, OH	Thunderstorms	400	50,636
6/22/2010	Entergy (SERC)	3:34 p.m.	West/Central Arkansas	Made Public Appeal/Transmission Equipment Failure	84	25,159
6/23/2010	Commonwealth Edison (RFC)	5:00 p.m.	Chicago, IL	Severe Weather	N/A	300,000
6/23/2010	Northern Indiana Public Service Company (RFC)	5:48 p.m.	Northwest Indiana	Thunderstorms	N/A	53,000
6/24/2010	Atlantic City Electric (RFC)	3:00 p.m.	Southwestern New Jersey	Thunderstorms	N/A	150,000
6/24/2010	PECO (RFC)	3:30 p.m.	Southeastern Pennsylvania	Thunderstorms	N/A	355,000
6/25/2010	Pacific Gas and Electric (WECC)	11:36 p.m.	Northern California	Electrical System Separation	N/A	N/A

### July

7/6/2010	Delmarva Power & Light Company (RFC)	3:47 a.m.	Newark, DE	Transformer Outage	95	18,400
7/7/2010	PJM Interconnection, LLC (RFC)	4:13 p.m.	York, South Central Pennsylvania	Loss of Transmission Equipment	N/A	43,903
7/15/2010	Detroit Edison (RFC)	7:00 p.m.	Southeastern Michigan	Severe Weather	540	127,534
7/17/2010	Xcel Energy (MRO)	8:30 p.m.	Minnesota	Strong Winds, Tornadoes	N/A	63,000
7/21/2010	ISO New England (NPCC)	6:44 p.m.	Connecticut	Thunderstorms	N/A	50,100
7/23/2010	Pacificorp (WECC)	10:00 a.m.	Northern Utah	Made Public Appeals	8-Jun	N/A
7/23/2010	Detroit Edison (RFC)	7:30 p.m.	Southeastern Michigan	Severe Weather	400	82,000

**Table B.2. Major Disturbances and Unusual Occurrences, Year-to-Date through December 2010**

Date	Utility/Power Pool (NERC Region)	Time	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected <sup>1</sup>
7/25/2010	Potomac Electric Power Co (RFC)	3:10 p.m.	Washington, DC Region	Severe Weather	N/A	297,700
7/25/2010	Baltimore Gas and Electric (RFC)	3:20 p.m.	Central Maryland	Severe Weather	480	124,000
7/25/2010	Dominion - Virginia Power (SERC)	4:11 p.m.	Northern Virginia	Severe Weather	900-1000	81,000
7/29/2010	Dominion - Virginia Power (SERC)	5:43 p.m.	Virginia	Thunderstorms	N/A	55,000
7/29/2010	Southern California Edison Company (WECC)	6:39 p.m.	Southern California	Shed Interruptible Load, Wildfire	522	N/A
7/29/2010	California Independent System Operator (WECC)	6:39 p.m.	Southern California	Shed Interruptible Load, Wildfire	522	N/A

### August

8/2/2010	California Department of Waters Resources (WECC)	12:00 p.m.	Central California	Fuel Supply Deficiency (Hydro)	N/A	N/A
8/2/2010	Cleco Power LLC (SERC)	12:45 p.m.	Southern Louisiana	Made Public Appeals	N/A	N/A
8/2/2010	Entergy (SERC)	12:45 p.m.	Southern Louisiana	Made Public Appeals	N/A	N/A
8/2/2010	Southwest Louisiana Electric Membership Corporation (SERC)	12:45 p.m.	Southwestern Louisiana	Made Public Appeals	N/A	N/A
8/2/2010	Lafayette Utilities Systems (SPP)	12:45 p.m.	Southern Louisiana	Made Public Appeals	N/A	N/A
8/4/2010	Southwestern Public Service Company (SPP)	12:00 p.m.	Northern Texas, Eastern New Mexico	Made Public Appeals	N/A	N/A
8/4/2010	Allegheny Power (RFC)	4:45 p.m.	Western Pennsylvania, Northwestern and Central West Virginia	Thunderstorms	60	11,186
8/4/2010	American Electric Power (RFC)	5:00 p.m.	Ohio, West Virginia, Kentucky	Severe Weather	N/A	37,000
8/5/2010	Potomac Electric Power Co (RFC)	3:30 p.m.	District of Columbia, Maryland	Thunderstorms	N/A	76,729
8/5/2010	Dominion - Virginia Power (RFC)	3:54 p.m.	Northern Virginia	Thunderstorms	N/A	145,157
8/9/2010	AES Greenidge and Cayuga0RFC)	12:00 p.m.	Upstate New York	Fuel Supply Deficiency	N/A	N/A
8/11/2010	American Electric Power (RFC)	3:21 p.m.	Ohio	Severe Weather	N/A	57,000
8/12/2010	Potomac Electric Power Co. (RFC)	6:45 a.m.	District of Columbia, Maryland	Severe Weather	N/A	101,003
8/12/2010	Nebraska Public Power District (SPP)	8:21 a.m.	Central Nebraska	Made Public Appeals	65	N/A
8/12/2010	Wisconsin Public Service (MRO)	3:42 p.m.	City of Oshkosh, Wisconsin	Made Public Appeals	30	7,600
8/19/2010	Detroit Edison (RFC)	6:00 p.m.	Southeastern Michigan	Severe Weather	340	80,000
8/23/2010	CenterPoint Energy (TRE)	5:50 p.m.	Houston, Texas	Severe Weather	746	81,586
<b>September</b>						
9/1/2010	Pacific Gas and Electric (WECC)	10:20 a.m.	Pittsburg (Bay Area), California	Electrical System Separation (Islanding)	31	15,000
9/7/2010	CPS Energy (TRE)	2:02 p.m.	San Antonio, Texas	Tropical Storm	N/A	340,350
9/20/2010	Birchwood Power Facility (SERC)	5:00 p.m.	King George County, Virginia	Low Flying Helicopter	N/A	N/A
9/21/2010	Consumers Energy (RFC)	9:31 p.m.	Central and Southern Michigan	Thunderstorms	N/A	138,000

9/22/2010	California Department of Water Resources (WECC)	6:12 a.m.	Bakersfield, California	Firm Load Shed	526	N/A
9/22/2010	Duquesne Light Company (RFC)	4:08 p.m.	City of Pittsburgh, Pennsylvania	Thunderstorms	156	52,000
9/22/2010	Allegheny Power (RFC)	5:38 p.m.	Western Pennsylvania	Thunderstorms	389	82,861
9/27/2010	Southern California Edison Company (WECC)	3:15 p.m.	Central and Southern California	Interruptible Load Shed	595	N/A

October						
10/5/2010	Los Angeles Department of Water and Power (WECC)	5:45 a.m.	City of Los Angeles, California	Rain and High Winds	N/A	73,514
10/26/2010	Commonwealth Edison (RFC)	9:00 a.m.	Northern Illinois	Thunderstorms	N/A	192,106
10/26/2010	Xcel Energy/Northern States Power Company (MRO)	8:00 p.m.	Minnesota	High Winds	N/A	70,000
10/27/2010	Wisconsin Public Service Corporation (MRO)	4:00 a.m.	Northeast and North Central Wisconsin	High Winds	N/A	63,000

**Table B.2. Major Disturbances and Unusual Occurrences, Year-to-Date through December 2010**

Date	Utility/Power Pool (NERC Region)	Time	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
10/27/2010	Consumers Energy (RFC)	8:00 a.m.	Michigan's Northerly Lower Peninsula	High Winds	240	285,000
10/27/2010	Commonwealth Edison (RFC)	5:00 p.m.	Northern Illinois	High Winds	N/A	127,000
10/27/2010	Pacific Gas and Electric (WECC)	5:16 p.m.	Northern California	Electrical System Separation-Islanding	16	2,674
10/31/2010	California Department of Water Resources (WECC)	10:26 p.m.	Bakersfield, California	Firm System Load Loss	500	N/A
November						
11/4/2010	PacifiCorp (WECC)	9:46 a.m.	Rock Springs, Wyoming	Transmission Equipment Failure/Interruptible Load Shed	N/A	N/A
11/6/2010	Pacific Gas and Electric (WECC)	3:53 p.m.	Northern California	Electrical System Separation - Islanding	20	4
11/8/2010	ISO New England (NPCC)	6:47 a.m.	Maine	Snow and High Winds	N/A	60,863
11/13/2010	Xcel Energy/Northern States Power Company (MRO)	3:00 p.m.	Minnesota	Winter Storm	N/A	60,000
11/15/2010	Puget Sound Energy (WECC)	11:00 p.m.	Puget Sound Region	High Winds	391	149,256

11/21/2010	Pacific Gas and Electric (WECC)	1:39 a.m.	Northern and Central California	Winter Storm	75	60,000
11/22/2010	Puget Sound Energy (WECC)	11:00 p.m.	Puget Sound Region, Washington	Winter Storm	420	123,535
11/23/2010	Pacific Gas and Electric (WECC)	2:01 p.m.	Northern California	Electrical System Separation - Islanding	22	7,077
<b>December</b>						
12/3/2010	Pacific Gas and Electric (WECC)	9:32 p.m.	California	Electrical System Separation - Islanding	22	7,077
12/12/2010	Detroit Edison (RFC)	4:30 p.m.	Southeastern Michigan	Severe Weather	210	60,175
12/14/2010	Pacific Gas and Electric (WECC)	7:20 a.m.	California	Electrical System Separation - Islanding	9	6,635
12/14/2010	California Department of Water Resources (WECC)	7:36 a.m.	Southern California	Transmission Equipment/Firm System Load	464	N/A
12/18/2010	Puget Sound Energy (WECC)	5:00 a.m.	Redmond, Washington	Severe Weather	184	92,090
12/26/2010	Progress Energy Carolinas (SERC)	8:15 a.m.	Carolina	Severe Weather	N/A	42,000
12/30/2010	AES Cayuga (RFC)	2:00 p.m.	New York	Fuel Supply Deficiency	300	N/A

[\[1\] Estimated values.](#)

Note: Estimates for 2010 are preliminary.

Source: Form OE-417, "Electric Emergency Incident and Disturbance Report."

---

## Restoration

6:00 p.m. January  
08

9:57 a.m. January  
11

8:00 a.m. January  
28

12:24 p.m. January  
19  
3:00 p.m. January  
20

6:10 p.m. January  
24

12:00 p.m.  
February 02

5:00 p.m. February  
01

4:00 p.m. February  
13

5:00 p.m. February  
07

3:46 p.m. February  
12

12:00 p.m.  
February 12  
2:38 a.m. February  
07

7:00 a.m. February  
07

9:00 a.m. February  
06

4:00 p.m. February  
14

9:00 p.m. February  
15



5:00 p.m. February  
12

12:00 p.m.  
February 14

4:01 a.m. February  
20

4:00 p.m. February  
25

9:00 p.m. February  
26

7:00 p.m. March  
02

4:40 p.m. March  
01

6:40 p.m. March  
16

8:05 p.m. March  
15

4:00 p.m. March  
17

12:00 a.m. March  
16

12:59 p.m. March  
20

9:00 a.m. March 20


12:55 a.m. April 01

12:38 a.m. April 01

5:00 p.m. April 18


**Restoration**  
8:00 p.m. April 21

2:55 p.m. April 27

  
7:30 p.m. May 09

10:46 p.m. May 18

3:00 p.m. May 26

  
12:30 a.m. June 18

8:00 a.m. June 04

5:35 a.m. June 06

1:00 a.m. June 08

5:00 p.m. June 08

3:00 p.m. June 09

11:32 a.m. June 16

5:47 p.m. June 17

5:17 p.m. June 17

4:40 p.m. June 17

4:40 p.m. June 17

11:02 a.m. June 17

12:30 a.m. June 20

1:00 p.m. June 20

5:00 a.m. June 19

10:45 a.m. June 21

7:30 p.m. June 22

8:31 p.m. June 22

7:00 p.m. June 22


1:40 p.m. June 25

2:21 a.m. June 24

12:00 p.m. June 29

11:59 p.m. June 29

1:38 a.m. June 26

  
4:37 a.m. July 06

10:29 p.m. July 07

11:30 p.m. July 19

10:00 p.m. July 19

8:00 p.m. July 21

11:55 p.m. July 24

6:30 p.m. July 26

**Restoration**

11:30 p.m. July 30

6:00 p.m. July 27

8:06 p.m. July 25

8:07 p.m. July 29

7:26 p.m. July 29

7:26 p.m. July 29



11:00 p.m. August  
02

11:00 a.m. August  
04

11:00 a.m. August  
04

11:00 a.m. August  
04

11:00 a.m. August  
04

10:00 p.m. August  
04

12:00 a.m. August  
07

4:00 a.m. August  
06

10:00 p.m. August  
05

12:00 a.m. August  
08

12:00 p.m. August  
16

12:12 p.m. August  
11

9:00 p.m. August  
12

11:00 a.m. August  
12

10:10 p.m. August  
12

3:30 p.m. August  
23

9:30 a.m. August  
24

12:44 p.m.  
September 01

1:27 a.m.  
September 08

5:30 p.m.  
September 20


2:30 p.m.  
September 22

11:00 p.m.  
September 22

12:00 a.m.  
September 26

11:30 p.m.  
September 24

6:12 p.m.  
September 27



6:00a.m. October  
07

11:00 a.m. October  
28

10:00 p.m. October  
28

12:00 p.m. October  
27

---

---


**Restoration**

7:00 a.m. October  
29

4:00 a.m. October  
29

5:27 p.m. October  
27

1:45 a.m.  
November 01



10:47 a.m.  
November 04

6:08 p.m.  
November 06

6:00 p.m.  
November 08


10:00 p.m.  
November 14

2:14 a.m.  
November 16

4:46 p.m.  
November 24

8:00 p.m.  
November 24

6:12 p.m.  
November 23



2:00 a.m.  
December 04

2:00 p.m.  
December 15  
7:25 a.m.  
December 14

9:00 a.m.  
December 15

10:00 p.m.  
December 19  
4:15 p.m.  
December 26

6:00 a.m. January  
12