Blackout Tracker

United States Annual Report 2011

Switch **O**N to Eaton.



Table of contents

Introduction	
Productivity and monetary loss	3
Top five most significant reported outages	4
Top five reported data center outages	4
Top ten most unusual outages/causes	
Pros and cons of underground power lines	5
What you can do to protect your business	
Overview of 2011 national power outage data	7
Outage summary	
Top ten states with most reported outages	
Number of reported outages by state	
Top states for outages caused by weather / falling trees	
Top states for outages caused by vehicle accident	
Top states for outages caused by faulty equipment / human error	
Reported power outages by cause	
Reported power outages by month	
Reported power outages by animal type	11
Top states for outages caused by animals	
Power outage data by state	
Reported power outages by region	
State data overview	
Alabama	
Alaska	
Arizona	
Arkansas	
California	
Colorado	
Connecticut	
Delaware	
Florida	
Georgia	
Hawaii	
ldaho	
Illinois	
Indiana	
lowa	
Kansas	
Kentucky	
Louisiana	
Maine	
Maryland	
Massachusetts	
Michigan	
Minnesota	
Mississippi	
Missouri	
Montana	
Nebraska	
Nevada	
New Hampshire	
New Jersey	
New Mexico	
New York	44

North Carolina	45
North Dakota	
Ohio	
Oklahoma	
Oregon	49
Pennsylvania	50
Rhode Island	51
South Carolina	
South Dakota	53
Tennessee	54
Texas	55
Utah	56
Vermont	57
Virginia	
Washington	59
West Virginia	60
Wisconsin	61
Wyoming	62

Introduction

Welcome to Eaton Corporation's <u>Blackout Tracker</u> Annual Report for 2011. From the huge, farreaching power failures brought on by Hurricane Irene and snow and ice storms to the smaller, local disruptions which may have affected only one neighborhood, power outages caused problems for people and businesses in all 50 states.

This annual report is based on reported power outages in the U.S. The sources for data include: news services, newspapers, websites (including those of newspapers and TV stations) and personal accounts. We, at Eaton, hope that you find the report insightful and that it prompts you to take appropriate action to prepare for power outages that could affect you and your business or organization.

The main body of the report follows this introduction and is organized into two sections:

- 1. Overview of national power outage data
- 2. Power outage data by state

In all, 3,071 reported outages were tabulated and used as the basis for the 2011 report. The number of people affected by outages jumped from 17.5 million in 2010 to 41.8 million in 2011 due to multiple, massive power failures. The following chart outlines some overall data since 2008:

Year	Total number of outages	People affected
2008*	2,169	25.8 million
2009	2,840	13.5 million
2010	3,149	17.5 million
2011	3,071	41.8 million

^{*}Partial-year data. Data collection began on February 16, 2008.

Productivity and monetary loss

The losses from a power failure can be extensive and of great consequence. For a business, the recovery time is significant. The costs are high. According to Price Waterhouse research, after a power outage disrupts IT systems:

- 33+ percent of companies take more than a day to recover
- 10 percent of companies take more than a week
- It can take up to 48 hours to reconfigure a network
- It can take days or weeks to re-enter lost data
- 90 percent of companies that experience a computer disaster and don't have a survival plan go out of business within 18 months

Financially, power outages can mean substantial losses for the company affected. According to the US Department of Energy, when a power failure disrupts IT systems:

- 33 percent of companies lose \$20,000–\$500,000
- 20 percent lose \$500,000 to \$2 million
- 15 percent lose more than \$2 million

This is but a brief summary of the potential losses due a disruption to IT. The information is an excerpt from a white paper entitled, "Ten Ways to Protect Your IT Infrastructure." The entire white paper and other papers on various power-related topics can be found on the Eaton website.

Driving home the financial implications are the findings of Dr. Massoud Amin of the University of Minnesota. In the <u>Technology Leadership Institute (TLI)</u> blog, Dr. Amin estimates power outages and disturbances cost the U.S. economy between \$80 billion and \$188 billion per year. Also, the number of large blackouts is growing in number and severity. For example, the number of outages affecting 50,000 or more people has risen from a total of 41 in 1991–95 to 58 in 1996–

2000 to 92 in 2001–2005. According to Dr. Amin, the trend is similar for occurrences over 100 MW, going from 66 to 76 to 140 in the same time periods. Analysis of Blackout Tracker data confirms an upward trend with the following results for number of reported outages affecting 50,000 or more people:

- 42 outages in 2009
- 52 outages in 2010
- 109 outages in 2011

Top five most significant reported outages

- 1. **Hurricane Irene**, August 26-29 North Carolina to Maine. Hurricane Irene cut a path up the East Coast knocking out power for over six million people.
- 2. **Possible human error**, September 8 Southern California and part of Arizona. A massive outage, believed to have been caused by human error, knocked out power to approximately four million people for 12 hours.
- 3. **Surprise fall snow storm**, October 28-30 Mid-Atlantic to Maine. A very early snow storm caused power outages, cancelled school and created havoc for 1.75 million people.
- 4. **Powerful line of thunderstorms**, July 11 Chicago. The storms left 700,000 people in the dark.
- 5. **Winter storm**, January 27 Washington DC, Maryland, Virginia. Snow, sleet and ice caused outages for over 400,000 people.

A note about hurricanes: Seven hurricanes formed in the Atlantic in 2011 but only one, Irene, hit the U.S. 2010 and 2009 were unusually quiet years for hurricanes. In 2008, however, approximately five million people lost power due to Hurricanes Ike and Gustav.

Top five reported data center outages

Data centers have become absolutely essential to business. Whether it's supporting customer service, providing the conduit for collaboration between colleagues, performing number crunching for accounting and engineering or supporting a myriad of other business functions; data centers are the focal point of IT and business activity. So when a data center is not operating, many businesses simply cease to function. The criticality of data centers is evident by the coverage that downtime gets in the news and through social networking. Below, in chronological order, are five data center problems that were caused by power issues. Please note that it's difficult to ascertain the financial impact of the outages but in many cases, it's reasonable to expect that they were significant.

- 1. **University of Arkansas**, February 25 Fayetteville, AR. A fault in an underground cable caused the outage.
- 2. **US Airways**, June 13 Phoenix, AZ. The outage caused a nationwide disruption of the company's computer systems. The cause of the outage was not reported.
- 3. **Lunarpages**, June 19 Las Vegas, NV. The cause of the outage was not reported.
- 4. **Colo4**, August 10 Dallas, Texas. An automatic transfer switch failed, affecting customers for about six hours.
- 5. **State of Washington**, September 10 Olympia, Wash. A power surge brought down the State of Washington's data center. The data center was up and running the next day.

Information on how to protect a data center from downtime due to power problems may be found in several white papers available on the <u>Eaton website</u>.

Top ten most unusual outages/causes

- 1. **Has anybody seen my trampoline?** April 30 Spokane, Wash. Strong winds picked up a trampoline and dropped it into a substation. The trampoline caused a fault that cut power for 11,000 people.
- 2. A deer...with wings? March 25 East Missoula, Mont. No, it wasn't a flying deer that got tangled in overhead power lines. A bald eagle had killed a fawn and was apparently on the way back to its nest to have breakfast when it dropped the tiny deer on the power lines. This caused a short and a 30-minute power outage.
- 3. **Paragliding mishap**, January 3 Salt Lake City, Utah. A paraglider accidentally collided with a power line, causing a three-hour power outage. Fortunately, the paraglider survived.
- 4. **Boat**, October 1 San Leon, Texas. Power was interrupted for 1,000 people when a boat being towed on its trailer knocked down five power poles.
- 5. **Race car**, April 9 Peoria, Ariz. A race car flew over the wall at the Peoria Speedway and hit a power line, cutting power to the track for about an hour. No word on the condition of the driver.
- 6. **Beaver miscalculates trajectory of tree**, October 9 Durango, Colo. A beaver, involved in a construction project, cut down an Aspen tree sending it onto power lines. About 240 people were without power for about 2.5 hours.
- 7. **Huge dust storm**, July 5 Phoenix, Ariz. Approximately 10,000 residents were left without power when a dust storm hit the area. The storm was approximately 50 miles wide and thousands of feet high.
- 8. **Small balloons**, May17 Oakland, Calif. Mylar balloons got tangled in a power line sending 3,000 people into the dark.
- 9. **Big balloon**, October 2 Albuquerque, N.M. A hot-air balloon, in town from Lithuania for the 40th Albuquerque International Balloon Fiesta, got tangled in power lines cutting power to traffic lights. There were no reports of injuries. Over 500 hot-air balloons participated in the event.
- 10. **It's a long hike up the hill**, February 26 Monarch Pass, Colo. A snowcat driver inadvertently struck a transformer buried in three feet of fresh powder. The incident caused an outage for the entire Monarch Ski Area, sending disappointed skiers and snow boarders home.

Pros and cons of underground power lines

With 40 percent of reported outages caused by the weather and another eight percent caused by vehicle accidents, why aren't all power lines put underground?

After a large storm, particularly one involving ice and wind, questions about underground power lines are frequently asked. Ice storms bring down power lines because of falling trees and also because of the weight of ice on the power lines. If the wind is strong then the situation deteriorates further.

So why aren't power lines buried underground, eliminating the chance of weather-related outages? Also, many vehicle-related power failures could be avoided with buried power lines. In addition, removing above ground power lines from view would be much more aesthetically pleasing.

The main issue with underground power lines is cost. According to several studies on the subject, installation of underground power lines is approximately \$1 million per mile, 10 times the cost of overhead lines. Installation of underground transmission lines costs about \$5 million per mile, 10 times the cost of overhead lines. A study in North Carolina found that it would cost approximately \$41 billion and would take 25 years to bury all the power lines in the state. There are also

increased costs for maintenance and repair of lines that are underground. Outages caused by problems with underground lines last longer than those related to overhead lines. Rate increases to cover these increased costs were estimated at a whopping 125 percent.

In addition, underground systems, while inherently less prone to weather-related problems, are susceptible to flooding. Salt water exacerbates the problems.

The results of the studies are that the costs of burying power lines are generally cost-prohibitive. The cost becomes more reasonable if an entire development is being excavated and the power lines can be buried as part of this process. Another exception is in large cities where above ground space is at a premium and the underground infrastructure exists.

Source: Entergy Corporation.

What you can do to protect your business

The most important thing you can do to protect your business is to develop a power protection plan. If you don't know where to start, contact a company that specializes in power protection and get the expert advice needed. For some ideas on this topic visit the Eaton website and read the "Ten Ways to Protect Your IT Infrastructure," which should give you some ideas and things to consider regarding power protection.

Overview of 2011 national power outage data

This section provides aggregate data for the U.S. and includes all the data found in the subsequent state section.

Outage summary

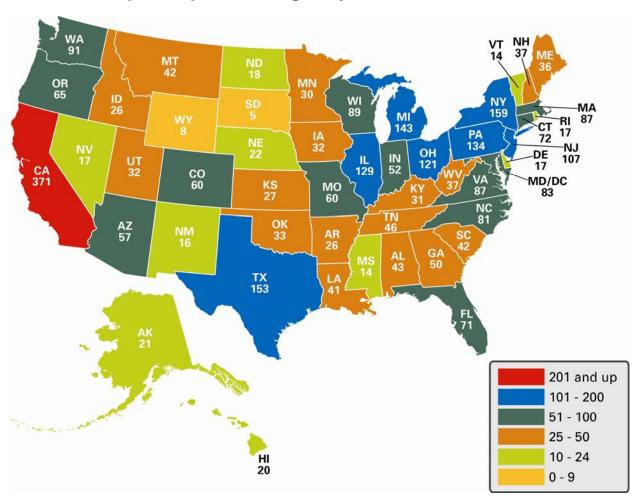
Total number of people affected by outages	41,817,145
(This is the sum of the number of people affected by	
reported power outages in the USA for 2011.)	
Total duration of outages	122,368 minutes
	(approximately 2,039 hours or 85 days)
(This is the sum of the durations of the reported power	
outages for 2011.)	
Total number of outages	3,071
(The sum of the number of reported power outages for	
2011.)	
Average number of people affected per outage	21,109
(This number is determined by dividing the "Total number	
of people affected by outages" by the number of outages	
that reported the number of people affected. Not all reports	
of outages included number of people affected. The	
number of outages used for this calculation can be found in	
the note following this table.)	
Average duration of outage	221 minutes
	(over 3.5 hours)
(This number is determined by dividing the "Total duration	,
of outages" by the number of outages that reported	
durations. Not all reports of outages included the duration.	
The number of outages used for this calculation can be	
found in the note following this table.)	

Notes: Total number of people affected (and average) is based on 1,981 (65%) of the total reported outages. Total duration of outages (and average) is based on 554 (18%) of the total reported outages. These are the number of outages that had reports that included data for number of people affected and duration, respectively.

Top ten states with most reported outages

•		. •	
2011		2010	2009
1.	California (371)	1. California (508)	1. California (363)
2.	New York (159)	2. New York (176)	2. Texas (141)
3.	Texas (153)	3. Texas (145)	3. New York (128) tie
4.	Michigan (143)	4. Ohio (135)	3. Washington (128) tie
5.	Pennsylvania (134)	5. Washington (125)	5. Ohio (111)
6.	Illinois (129)	6. New Jersey (121)	6. Florida (104)
7.	Ohio (121)	7. Pennsylvania (120)	7. Pennsylvania (94)
8.	New Jersey (107)	8. Florida (118)	8. Michigan (91)
9.	Washington (91)	9. Michigan (116)	9. North Carolina (89)
10.	Wisconsin (89)	10. Wisconsin (106)	10. Wisconsin (83)

Number of reported power outages by state



Top states for outages caused by weather/falling trees

2011	2010	2009	2008*
(1,229 total outages)	(1,127 total outages)	(920 total outages)	(750 total outages)
1. California (81)	1. California (111)	1. California (70)	1. New York (56)
2. Michigan (76)	2. New York (79)	2. New York (46)	2. Illinois (48)
3. New York (75)	3. Washington (50)	3. Texas (45)	3. Ohio (38)
4. Illinois (62)	4. Michigan (45)	4. Washington (43)	3. Texas (38)
5. Pennsylvania (57)	5. New Jersey (42)	5. Florida (38)	5. Michigan (34)
6. Texas (55)	6. Pennsylvania (41)	6. Georgia (36)	6. California (30)
7. Ohio (52)	6. Texas (41)	7. Pennsylvania (35)	7. Pennsylvania (27)
8. Wisconsin (48)	8. Connecticut (39)	8. North Carolina (33)	8. Florida (26)
9. Virginia (37)	9. Ohio (38)	9. Tennessee (31)	9. North Carolina
			(25)
10. New Jersey (35)	10. North Carolina	10. Illinois (27)	10. Missouri (21)
	(37)		
		10. Michigan (27)	
		10. Missouri (27)	
		10. Wisconsin (27)	

^{*}Partial-year data. Data collection began on February 16, 2008.

Top states for outages caused by vehicle accident

2011	2010	2009	2008*
(245 total outages)	(296 total outages)	(273 total outages)	(201 total outages)
1. California (31)	1. California (40)	1. California (41)	1. California (25)
2. Oregon (15)	2. New York (17)	2. Texas (20)	2. Ohio (14)
2. Texas (15)	3. Texas (16)	3. North Carolina (15)	3. North Carolina(13)
4. Pennsylvania (12)	4. New Jersey (15)	4. Oregon (12)	4. Virginia (11)
5. Illinois (11)	4. Wisconsin (15)	5. Georgia (10)	5. Florida (9)
5. Washington (11)	6. Indiana (14)	5. Ohio (10)	5. West Virginia (9)
7. New Jersey (10)	7. Pennsylvania (13)	5. Pennsylvania (10)	7. New York (8)
7. New York (10)	8. Ohio (11)	8. Missouri (9)	8. Texas (7)
9. Maine (8)	9. Florida (10)	9. New York (8)	9. Massachusetts (6)
9. Ohio (8)	9. Oregon (10)	9. Wisconsin (8)	9. Minnesota (6)
			9. Pennsylvania (6)

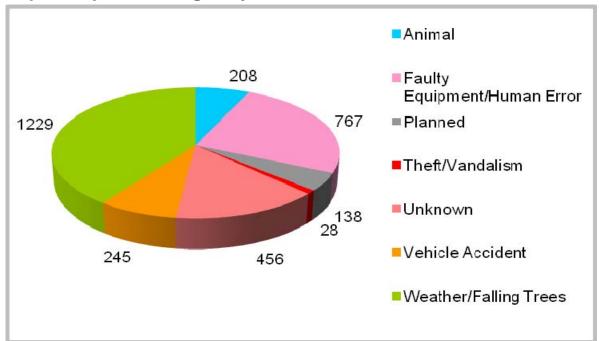
^{*}Partial-year data. Data collection began on February 16, 2008.

Top states for outages caused by faulty equipment/human error

2011	2010 (2009	2008*
(767 total outages)	895 total outages)	(834 total outages)	(639 total outages)
1. California (141)	1. California (171)	1. California (143)	1. California (105)
2. New York (39)	2. Texas (43)	2. Ohio (42)	2. Ohio (33)
3. Texas (38)	3. Florida (35)	3. Texas (40)	3. New York (31)
4. New Jersey (35)	3. Illinois (35)	4. Washington (39)	4. Florida (27)
5. Pennsylvania (28)	3. New York (35)	5. Michigan (33)	4. Texas (27)
6. Michigan (26)	6. Ohio (34)	5. New York (33)	6. Pennsylvania (26)
7. Ohio (25)	7. New Jersey (32)	7. Florida (32)	7. Washington (25)
8. Connecticut (24)	8. Washington (30)	8. Massachusetts	8. Illinois (21)
		(29)	
8. Illinois (24)	9. Pennsylvania (24)	9. Pennsylvania (24)	9. Michigan (18)
8. Massachusetts(24)	10. Virginia (29)	10. Illinois (21)	10. Indiana (17)
		10. Wisconsin (21)	10. Wisconsin (17)

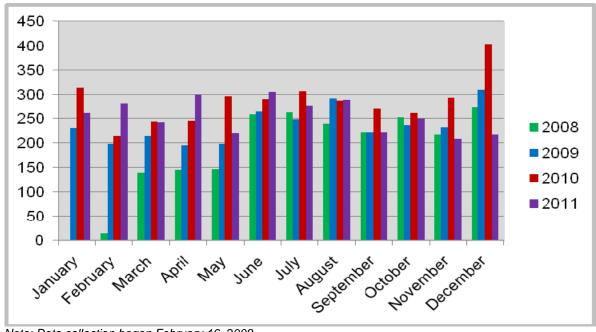
^{*}Partial-year data. Data collection began on February 16, 2008.

Reported power outages by cause

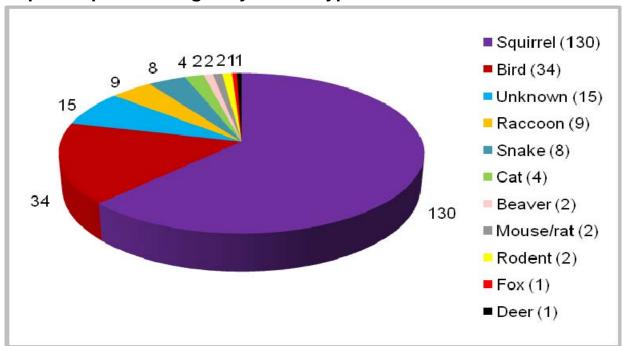


Note: Each power outage was grouped into one of seven possible causes. The number adjacent to the pie piece is the number of outages attributable to that cause.

Reported power outages by month



Reported power outages by animal type



Notes: Number following animal type in the legend indicates number of reported outages caused by that animal. The bird category includes the following types: wild turkey, sea gull, raven, goose, pigeon, hawk, crow, bald eagle, vulture, pheasant, great blue heron and unknown bird. January 21st is National Squirrel Appreciation day. Note: The deer (a tiny fawn) was dropped by a bald eagle onto a power line. The tabulation includes both animals.

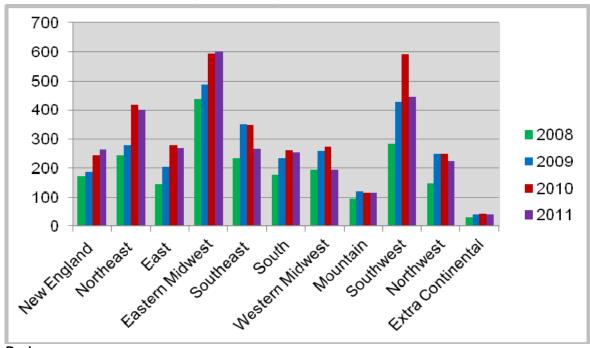
Top states for outages caused by animals

2010 (246 total outages)	2009 (197 total outages)	2008 * (140 total outages)
1. California (24)	1. California (20)	1. California (15)
2. Wisconsin (13)	2. Wisconsin (11)	2. Pennsylvania (9)
3. Ohio (12)	2. Indiana (11)	3. Texas (8)
3. Texas (12)	4. Michigan (10)	4. Illinois (7)
5. Kansas (11)	5. Missouri (9)	4. Washington (7)
6. New Jersey (10)	6. Ohio (8)	4. Wisconsin (7)
7. Michigan (9)	6. Texas (8)	7. New York (6)
7. Minnesota (9)	8. Tennessee (7)	8. Florida (5)
7. Pennsylvania (9)	8. New Hampshire	8. Indiana (5)
	(7)	
10. New York (8)	8. Oregon (7)	8. Kansas (5)
	8. lowa (7)	8. Ohio (5)
		8. Tennessee (5)
	1. California (24) 2. Wisconsin (13) 3. Ohio (12) 3. Texas (12) 5. Kansas (11) 6. New Jersey (10) 7. Michigan (9) 7. Minnesota (9) 7. Pennsylvania (9)	1. California (24) 1. California (20) 2. Wisconsin (13) 2. Wisconsin (11) 3. Ohio (12) 2. Indiana (11) 3. Texas (12) 4. Michigan (10) 5. Kansas (11) 5. Missouri (9) 6. New Jersey (10) 6. Ohio (8) 7. Michigan (9) 6. Texas (8) 7. Minnesota (9) 8. Tennessee (7) 7. Pennsylvania (9) 8. New Hampshire (7) 10. New York (8) 8. Oregon (7)

^{*}Partial-year data. Data collection began on February 16, 2008.

Power outage data by state

Reported power outages by region



Regions:

New England: Connecticut, Massachusetts, Rhode Island, Vermont, New Hampshire, Maine

Northeast: New York, Pennsylvania, New Jersey

East: Virginia, North Carolina, Maryland (includes Washington DC), Delaware

Eastern Midwest: Wisconsin, Illinois, West Virginia, Ohio, Michigan, Kentucky, Indiana

Southeast: Tennessee, Georgia, Alabama, Mississippi, South Carolina, Florida

South: Texas, Louisiana, Arkansas, Oklahoma

Western Midwest: South Dakota, North Dakota, Nebraska, Minnesota, Missouri, Kansas, Iowa

Mountain: Colorado, Wyoming, Utah, New Mexico

Southwest: Nevada, California, Arizona

Northwest: Washington, Oregon, Idaho, Montana

Extra Continental: Alaska, Hawaii

State data overview

This section of the report provides an analysis of the power outages by state. There are four parts to each analysis.

- 1. The first part is an outage summary. The results are computed in the same manner as those in the outage summary found in the national power outage data in the previous part of this report. Only data pertaining to the particular state is used.
- 2. The second part of the analysis on each state is the outage fact. This is simply an interesting fact concerning a particular outage (or outages) in a state.
- 3. The third part of the analysis is a chart of the power outages by cause. This is the same type of chart that can be found in the national power outage data in the previous part of this report. Only data pertaining to the particular state is used.
- 4. The last part of each state section is the number of power outages by month. This is the same type of chart that can be found in the national power outage data in the previous part of this report. Only data pertaining to the particular state is used. From this chart it may be possible to determine particular times of the year when power outages are more common.

Alabama

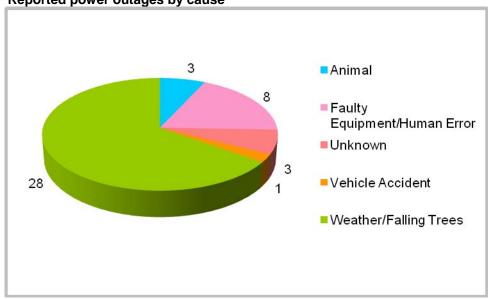
Outage summary

Total number of people affected by outages	836,418
Total duration of outages	286 minutes (over 4.5 hours)
Total number of outages	43
Average number of people affected per outage	39,829
Average duration of outage	57 minutes

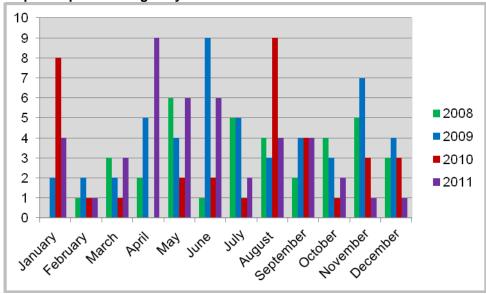
Note: Total number of people affected (and average) based on 21 (49%) of the total reported outages. Total duration of outages (and average) based on 5 (12%) of the total reported outages.

Outage fact: On April 28, a deadly line of tornadoes caused outages for 412,000 people in the Montgomery area.

Reported power outages by cause



Reported power outages by month



Alaska

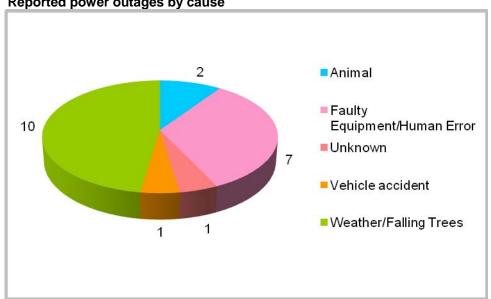
Outage summary

Total number of people affected by outages	60,800
Total duration of outages	455 minutes (over 7.5 hours)
Total number of outages	21
Average number of people affected per outage	6,756
Average duration of outage	65 minutes (over 1 hour)

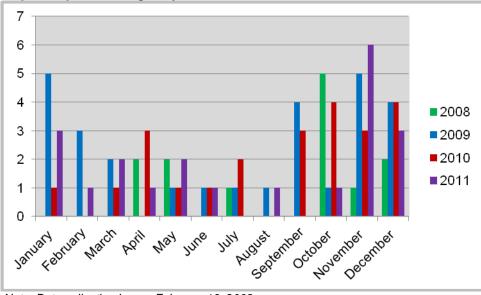
Note: Total number of people affected (and average) based on 9 (43%) of the total reported outages. Total duration of outages (and average) based on 7 (33%) of the total reported outages.

Outage fact: On August 2 a tree fell on a power line knocking out power for 24,700 people in Chugach for up to an hour.

Reported power outages by cause



Reported power outages by month



Arizona

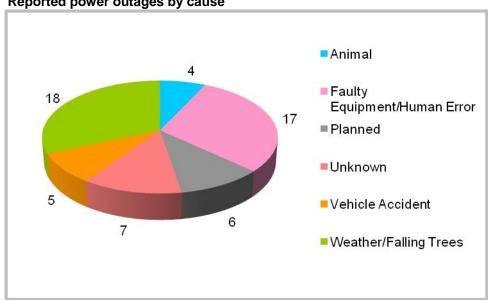
Outage summary

Total number of people affected by outages	334,361
Total duration of outages	1,620 minutes (27 hours)
Total number of outages	57
Average number of people affected per outage	9,288
Average duration of outage	101 minutes (over 1.5 hours)

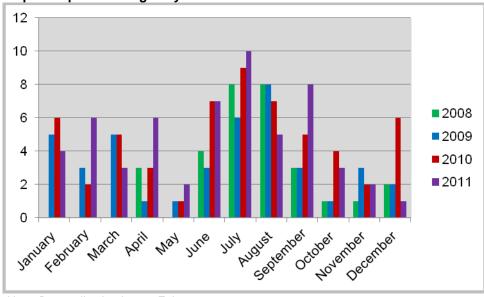
Note: Total number of people affected (and average) based on 36 (63%) of the total reported outages. Total duration of outages (and average) based on 16 (28%) of the total reported outages.

Outage fact: On July 5 a dust storm, which was 50 miles wide and thousands of feet high, caused a power interruption for 10,000 residents of Phoenix.

Reported power outages by cause



Reported power outages by month



Arkansas

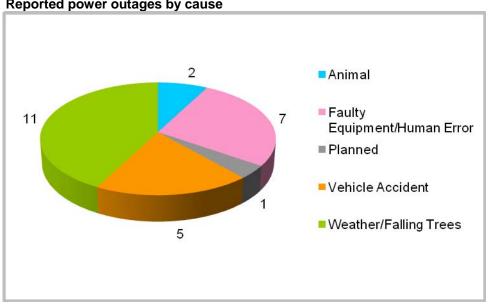
Outage summary

Total number of people affected by outages	174,964
Total duration of outages	275 minutes (over 4.5 hours)
Total number of outages	26
Average number of people affected per outage	10,935
Average duration of outage	69 minutes (over 1 hour)

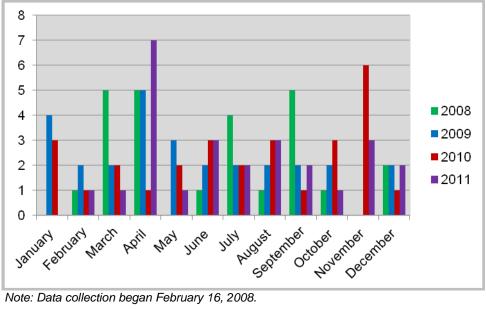
Note: Total number of people affected (and average) based on 16 (62%) of the total reported outages. Total duration of outages (and average) based on 4 (15%) of the total reported outages.

Outage fact: On November 12 a raccoon entered a substation and caused a power outage for 4,500 people in Fayetteville.

Reported power outages by cause



Reported power outages by month



California

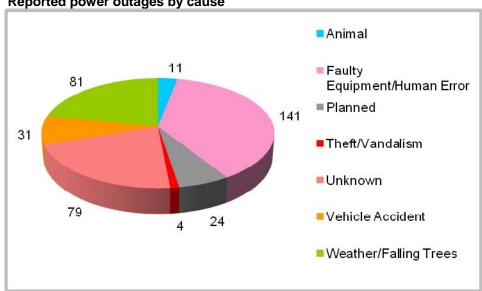
Outage summary

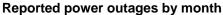
Total number of people affected by outages	6,622,964
Total duration of outages	18,279 minutes (over 12.5 days)
Total number of outages	371
Average number of people affected per outage	22,759
Average duration of outage	250 minutes (over 4 hours)

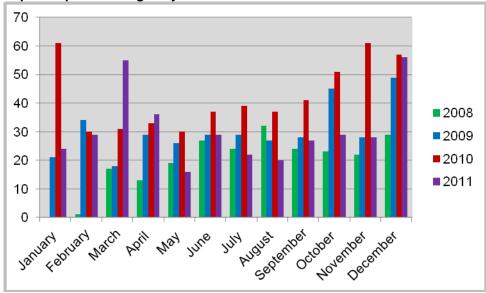
Note: Total number of people affected (and average) based on 291 (78%) of the total reported outages. Total duration of outages (and average) based on 73 (20%) of the total reported outages.

Outage fact: On September 8 a massive outage, believed to have been caused by human error, hit southern California knocking out power to approximately 4 million people for 12 hours.

Reported power outages by cause







Colorado

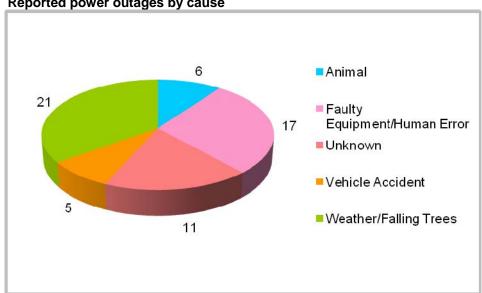
Outage summary

_ c arrange c arranting	
Total number of people affected by outages	300,305
Total duration of outages	2,280 minutes (38 hours)
Total number of outages	60
Average number of people affected per outage	8,342
Average duration of outage	152 minutes (over 2.5 hours)

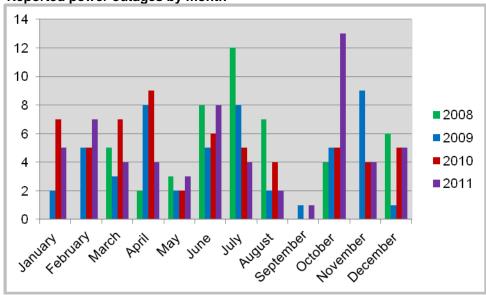
Note: Total number of people affected (and average) based on 36 (60%) of the total reported outages. Total duration of outages (and average) based on 15 (25%) of the total reported outages.

Outage fact: On October 14 a squirrel got into electrical equipment and caused a 35minute outage for 1,850 people in Longmont.

Reported power outages by cause



Reported power outages by month



Connecticut

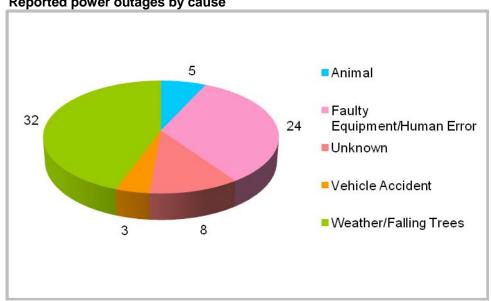
Outage summary

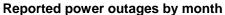
- uning - unining	
Total number of people affected by outages	1,513,542
Total duration of outages	1,725 minutes (over 28.5 hours)
Total number of outages	72
Average number of people affected per outage	32,203
Average duration of outage	246 minutes (over 4 hours)

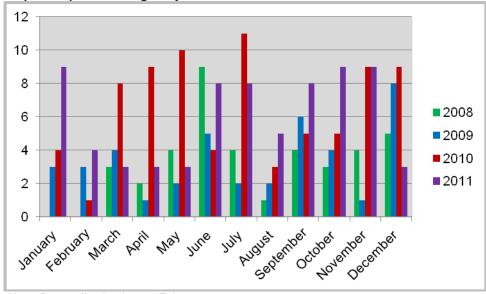
Note: Total number of people affected (and average) based on 47 (65%) of the total reported outages. Total duration of outages (and average) based on 7 (10%) of the total reported outages.

Outage fact: On August 28 the remnants of Hurricane Irene cut power to 750,000 residents of both coastal and inland areas of Connecticut.

Reported power outages by cause







Delaware

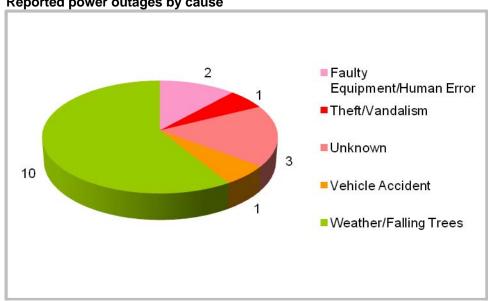
Outage summary

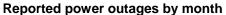
Total number of people affected by outages	97,687
Total duration of outages	325 minutes (over 5 hours)
Total number of outages	17
Average number of people affected per outage	9,769
Average duration of outage	163 minutes (over 2.5 hours)

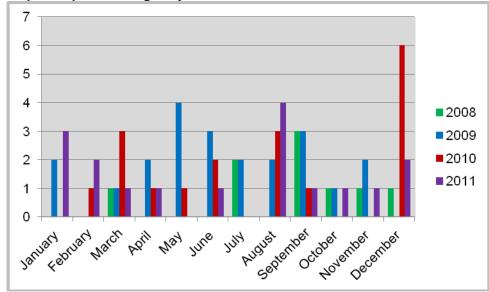
Note: Total number of people affected (and average) based on 10 (59%) of the total reported outages. Total duration of outages (and average) based on 2 (12%) of the total reported outages.

Outage fact: On September 28 thieves stole copper wire from two substations and knocked out power for 30,000 residents of Bethany Beach.

Reported power outages by cause







Florida

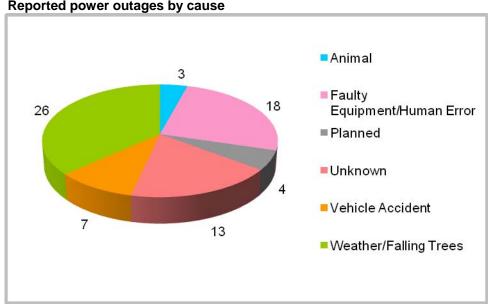
Outage summary

Total number of people affected by outages	269,507
Total duration of outages	658 minutes (nearly 11 hours)
Total number of outages	71
Average number of people affected per outage	7,486
Average duration of outage	60 minutes

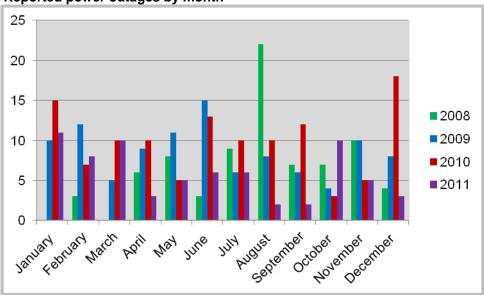
Note: Total number of people affected (and average) based on 36 (51%) of the total reported outages. Total duration of outages (and average) based on 11 (15%) of the total reported outages.

Outage fact: On March 31 a powerful spring storm cut power to 88,000 residents of Tampa.

Reported power outages by cause







Georgia

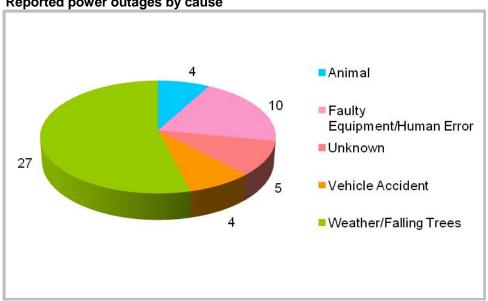
Outage summary

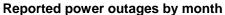
Total number of people affected by outages	386,007
Total duration of outages	908 minutes (over 15 hours)
Total number of outages	50
Average number of people affected per outage	10,722
Average duration of outage	101 minutes (over 1.5 hours)

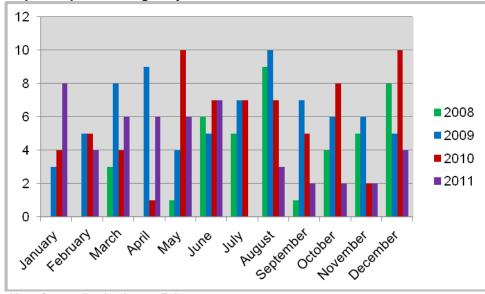
Note: Total number of people affected (and average) based on 36 (72%) of the total reported outages. Total duration of outages (and average) based on 9 (18 %) of the total reported outages.

Outage fact: On April 5 powerful storms knocked out power for 200,000 residents of the Atlanta area.

Reported power outages by cause







Hawaii

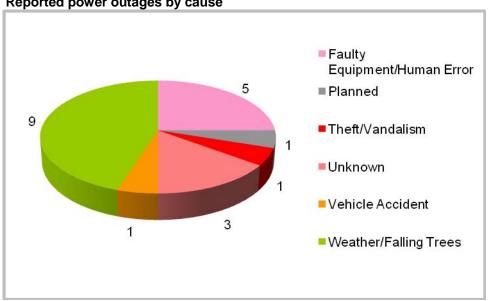
Outage summary

Total number of people affected by outages	78,960
Total duration of outages	860 minutes (over 14 hours)
Total number of outages	20
Average number of people affected per outage	8,773
Average duration of outage	430 minutes (over 7 hours)

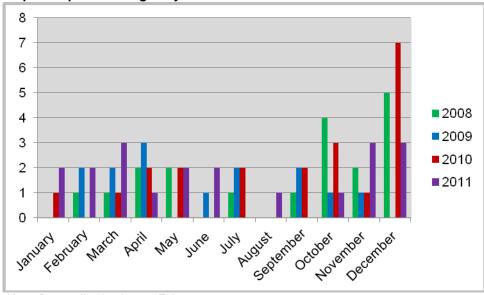
Note: Total number of people affected (and average) based on 9 (45%) of the total reported outages. Total duration of outages (and average) based on 2 (10%) of the total reported outages.

Outage fact: On May 3 lightning caused a power outage for 60,000 people on Oahu.

Reported power outages by cause



Reported power outages by month



Idaho

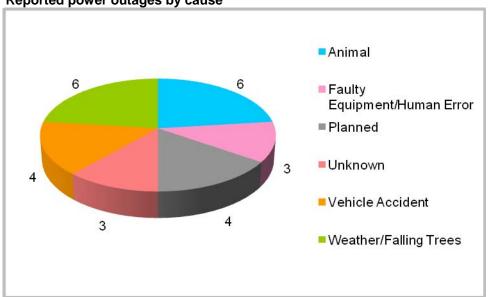
Outage summary

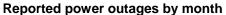
Total number of people affected by outages	23,487
Total duration of outages	1,708 minutes (over 28 hours)
Total number of outages	26
Average number of people affected per outage	1,382
Average duration of outage	142 minutes (over 2 hours)

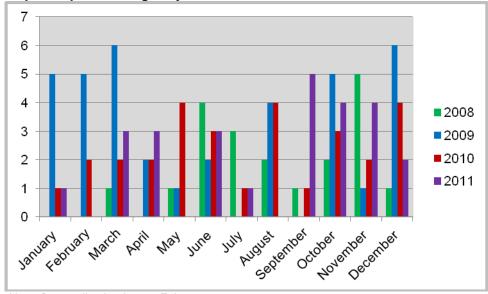
Note: Total number of people affected (and average) based on 17 (65%) of the total reported outages. Total duration of outages (and average) based on 12 (46%) of the total reported outages.

Outage fact: On July 4 birds got into transformer causing a power cut for 2,500 residents of Clarkston for 75 minutes.

Reported power outages by cause







Illinois

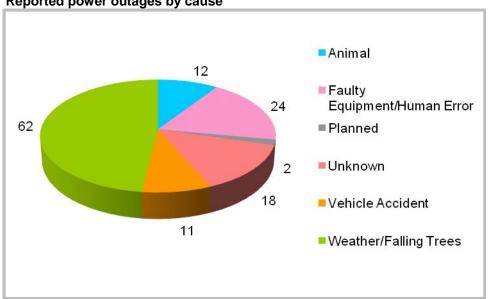
Outage summary

Total number of people affected by outages	1,831,354
Total duration of outages	1,992 minutes (over 33 hours)
Total number of outages	129
Average number of people affected per outage	21,545
Average duration of outage	125 minutes (over 2 hours)

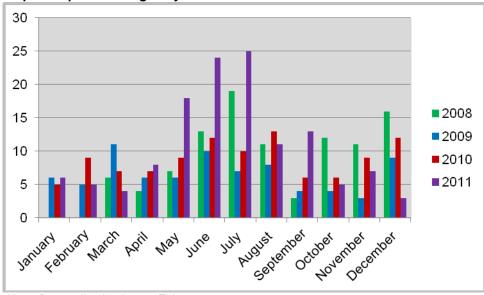
Note: Total number of people affected (and average) based on 85 (66%) of the total reported outages. Total duration of outages (and average) based on 16 (12%) of the total reported outages.

Outage fact: On July 11 a line of powerful thunderstorms caused a power outage for 700,000 people in the Chicago area.

Reported power outages by cause



Reported power outages by month



Indiana

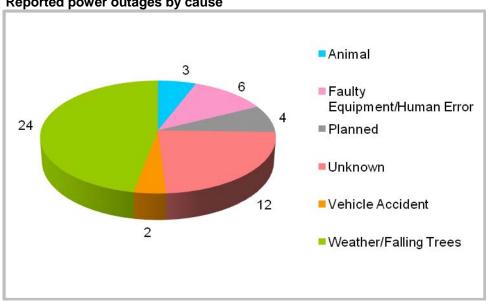
Outage summary

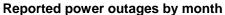
_ c arrange c arrante y	
Total number of people affected by outages	353,660
Total duration of outages	1,073 minutes (over 17.5 hours)
Total number of outages	51
Average number of people affected per outage	12,195
Average duration of outage	98 minutes (over 1.5 hours)

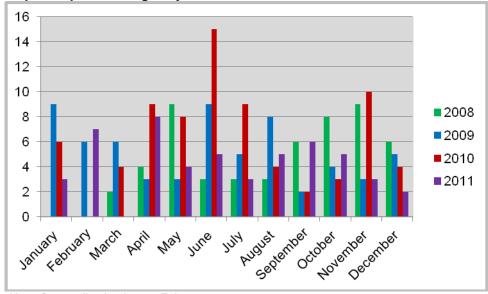
Note: Total number of people affected (and average) based on 29 (57%) of the total reported outages. Total duration of outages (and average) based on 11 (22%) of the total reported outages.

Outage fact: On May 25 strong thunderstorms knocked out power for 68,000 residents of Indianapolis.

Reported power outages by cause







Iowa

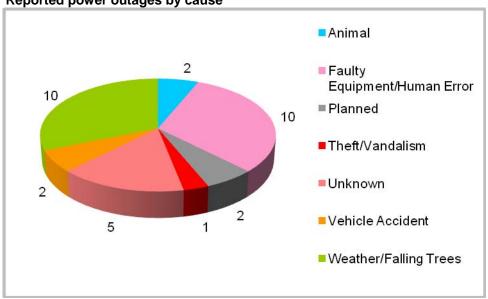
Outage summary

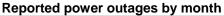
Total number of people affected by outages	52,305
Total duration of outages	5,030 minutes (nearly 3.5 days)
Total number of outages	32
Average number of people affected per outage	3,077
Average duration of outage	503 minutes (over 8 hours)

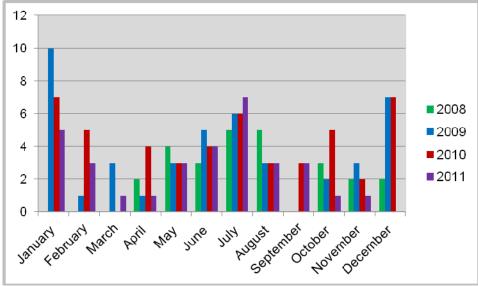
Note: Total number of people affected (and average) based on 17 (53%) of the total reported outages. Total duration of outages (and average) based on 10 (31%) of the total reported outages.

Outage fact: On October 22 a bird (not a Hawkeye) got into a substation causing a fault that resulted in a three-hour power outage for 2,500 residents of Mason City.

Reported power outages by cause







Kansas

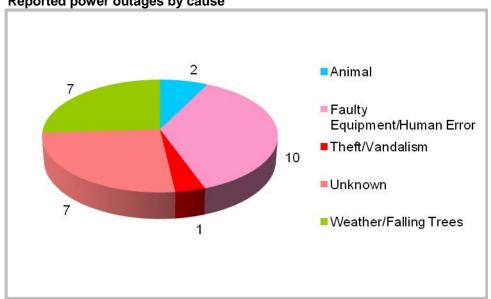
Outage summary

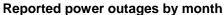
Total number of people affected by outages	92,794
Total duration of outages	655 minutes (nearly 11 hours)
Total number of outages	27
Average number of people affected per outage	5,800
Average duration of outage	131 minutes (over 2 hours)

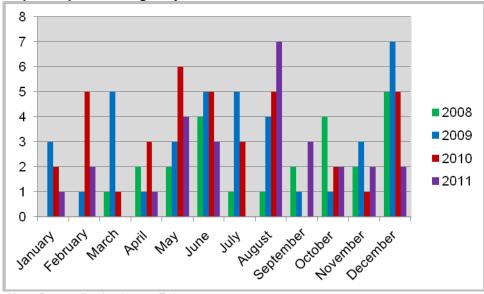
Note: Total number of people affected (and average) based on 16 (59%) of the total reported outages. Total duration of outages (and average) based on 5 (19%) of the total reported outages.

Outage fact: On June 3 a six-foot black snake breached two phases of a power line causing a power outage for 7,000 people in Winfield.

Reported power outages by cause







Kentucky

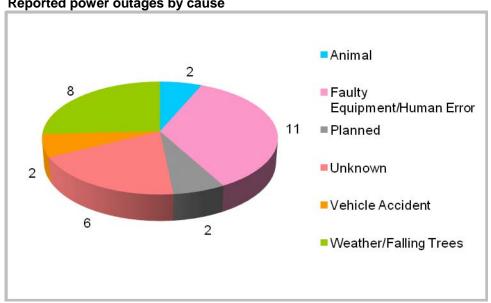
Outage summary

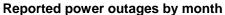
Total number of people affected by outages	428,883
Total duration of outages	1,045 minutes (nearly 17.5 hours)
Total number of outages	31
Average number of people affected per outage	21,444
Average duration of outage	209 minutes (nearly 3.5 hours)

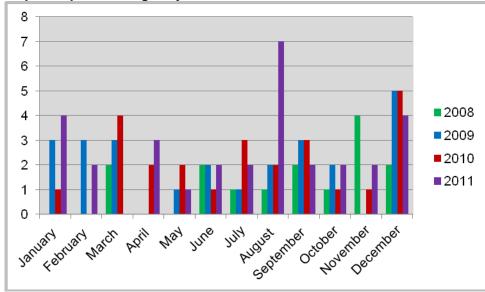
Note: Total number of people affected (and average) based on 20 (65%) of the total reported outages. Total duration of outages (and average) based on 5 (16%) of the total reported outages.

Outage fact: On August 15 a line of thunderstorms caused a power outage for 100,000 residents of Louisville.

Reported power outages by cause







Louisiana

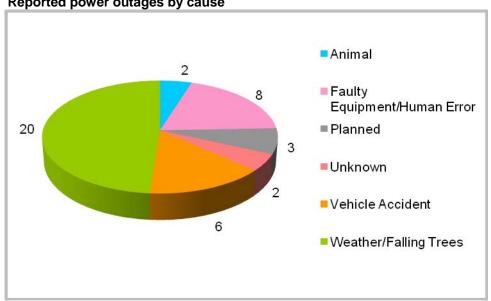
Outage summary

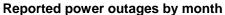
- uning - unining	
Total number of people affected by outages	277,010
Total duration of outages	905 minutes (over 15 hours)
Total number of outages	41
Average number of people affected per outage	9,893
Average duration of outage	151 minutes (over 2.5 hours)

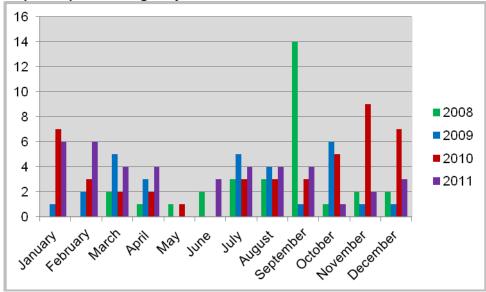
Note: Total number of people affected (and average) based on 28 (68%) of the total reported outages. Total duration of outages (and average) based on 6 (15%) of the total reported outages.

Outage fact: On September 3 Tropical Storm Lee knocked down power lines cutting power for 38,000 people in New Orleans.

Reported power outages by cause







Maine

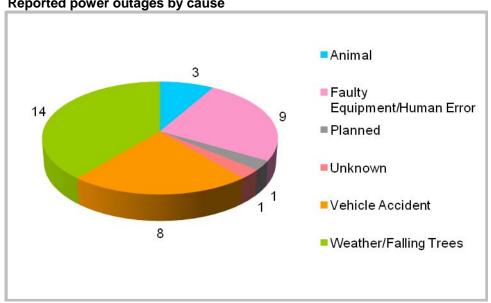
Outage summary

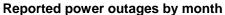
_ c arrange c arrante y	
Total number of people affected by outages	607,991
Total duration of outages	725 minutes (over 12 hours)
Total number of outages	36
Average number of people affected per outage	24,320
Average duration of outage	104 minutes (over 1.5 hours)

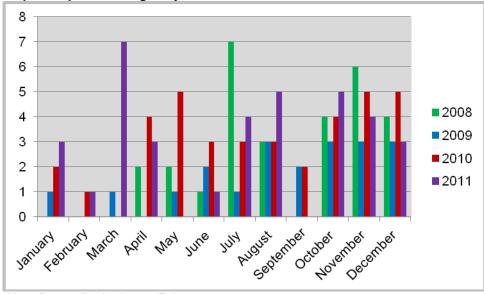
Note: Total number of people affected (and average) based on 25 (69%) of the total reported outages. Total duration of outages (and average) based on 7 (19%) of the total reported outages.

Outage fact: On August 28 Hurricane Irene downed power lines cutting power for 200,000 people in Kennebunkport and surrounding area.

Reported power outages by cause







Maryland

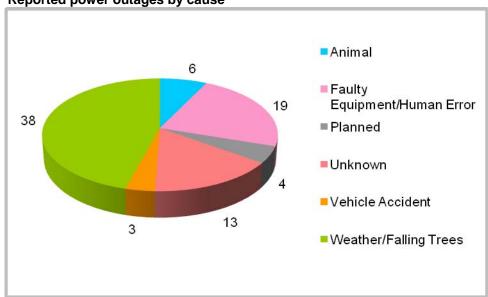
Outage summary

Total number of people affected by outages	1,598,143
Total duration of outages	3,420 minutes (57 hours)
Total number of outages	83
Average number of people affected per outage	33,295
Average duration of outage	263 minutes (over 4 hours)

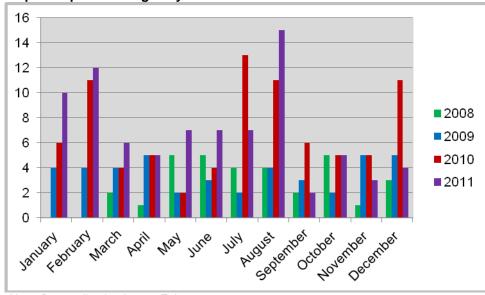
Note: Total number of people affected (and average) based on 48 (58%) of the total reported outages. Total duration of outages (and average) based on 13 (16%) of the total reported outages. Data includes outages in Wash. DC.

Outage fact: On January 27 over 600,000 people in Maryland and Washington DC lost power because of a huge winter storm.

Reported power outages by cause



Reported power outages by month



Massachusetts

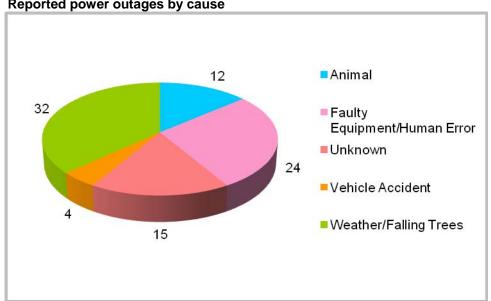
Outage summary

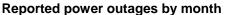
Total number of people affected by outages	1,173,178
Total duration of outages	2,045 minutes (over 34 hours)
Total number of outages	87
Average number of people affected per outage	20,950
Average duration of outage	128 minutes (over 2 hours)

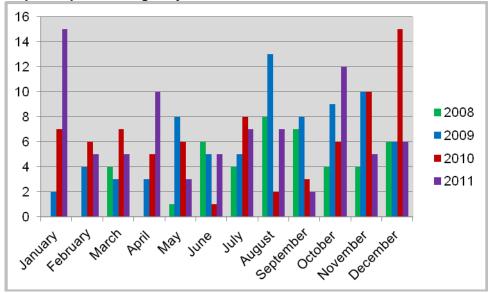
Note: Total number of people affected (and average) based on 56 (64%) of the total reported outages. Total duration of outages (and average) based on 16 (18%) of the total reported outages.

Outage fact: On January 12 a heavy, wet snow brought down trees and power lines, knocking out power for over 150,000 people in Boston and the surrounding area.

Reported power outages by cause







Michigan

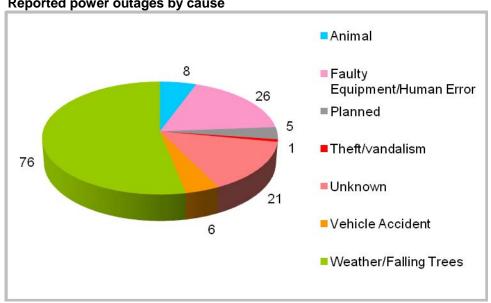
Outage summary

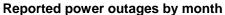
Total number of people affected by outages	1,767,881
Total duration of outages	4,055 minutes (over 67.5 hours)
Total number of outages	143
Average number of people affected per outage	17,504
Average duration of outage	312 minutes (over 5 hours)

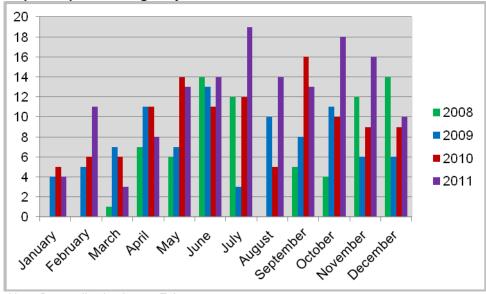
Note: Total number of people affected (and average) based on 101 (71%) of the total reported outages. Total duration of outages (and average) based on 13 (9%) of the total reported outages.

Outage fact: On May 29 a tornado knocked down power lines, interrupting power for 138,000 residents of Perry.

Reported power outages by cause







Minnesota

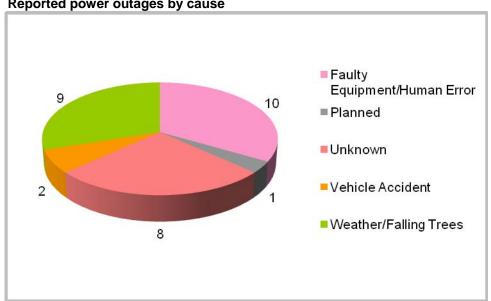
Outage summary

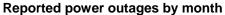
- uning - unining	
Total number of people affected by outages	146,080
Total duration of outages	1,435 minutes (nearly 24 hours)
Total number of outages	30
Average number of people affected per outage	8,593
Average duration of outage	159 minutes (over 2.5 hours)

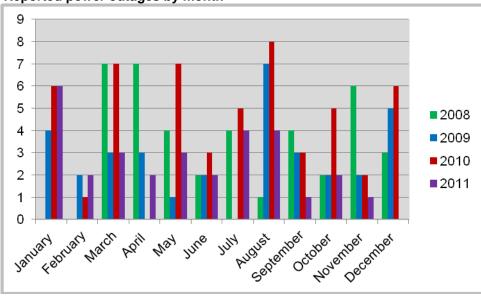
Note: Total number of people affected (and average) based on 17 (57%) of the total reported outages. Total duration of outages (and average) based on 9 (30%) of the total reported outages.

Outage fact: On July 1 storms cut the power for 90,000 people in the Willmar area.

Reported power outages by cause







Mississippi

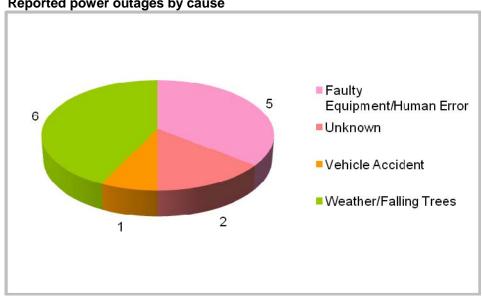
Outage summary

Outage summary	
Total number of people affected by outages	8,040
Total duration of outages	45 minutes
Total number of outages	14
Average number of people affected per outage	1,340
Average duration of outage	45 minutes

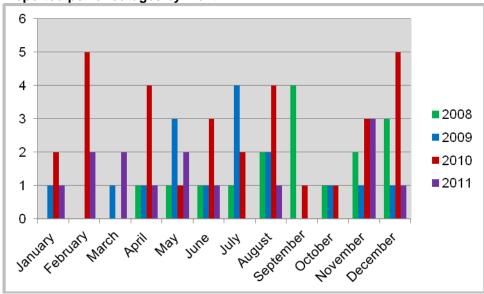
Note: Total number of people affected (and average) based on 6 (43%) of the total reported outages. Total duration of outages (and average) based on 1 (7%) of the total reported outages.

Outage fact: On February 5 a fire at a substation caused a 45 minute outage for 3,600 residents of Gulfport.

Reported power outages by cause



Reported power outages by month



Missouri

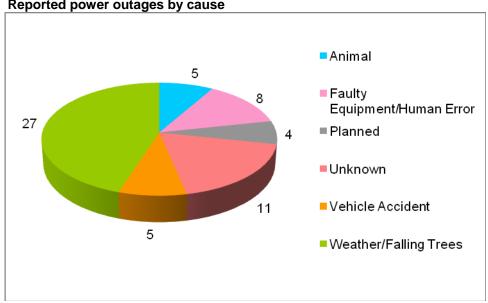
Outage summary

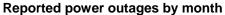
Total number of people affected by outages	322,991
Total duration of outages	1,033 minutes (over 17 hours)
Total number of outages	60
Average number of people affected per outage	11,138
Average duration of outage	79 minutes (over 1 hour)

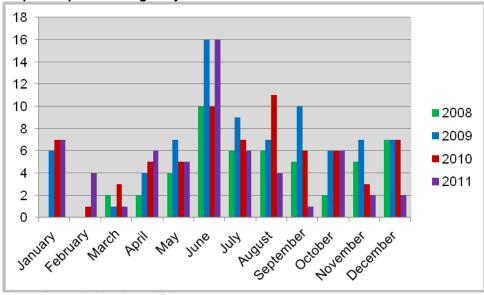
Note: Total number of people affected (and average) based on 29 (48%) of the total reported outages. Total duration of outages (and average) based on 13 (22%) of the total reported outages.

Outage fact: On April 22 a tornado knocked out power for 50,000 people in the St. Louis area.

Reported power outages by cause







Montana

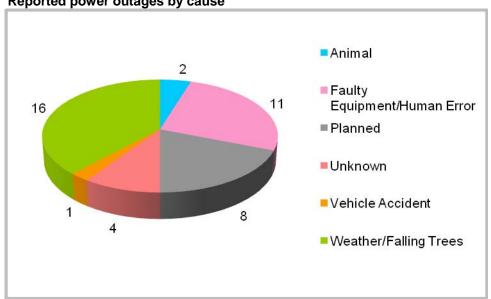
Outage summary

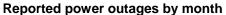
Total number of people affected by outages	40,465
Total duration of outages	2,385 minutes (over 39.5 hours)
Total number of outages	42
Average number of people affected per outage	1,686
Average duration of outage	149 minutes (nearly 2.5 hours)

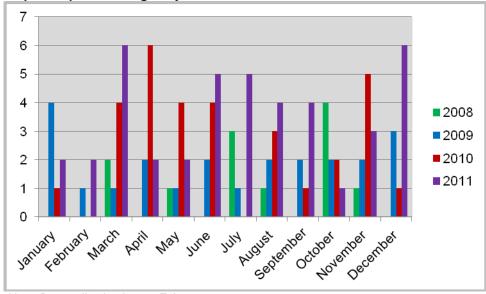
Note: Total number of people affected (and average) based on 24 (57%) of the total reported outages. Total duration of outages (and average) based on 16 (38%) of the total reported outages.

Outage fact: On July 7 in Kalispell, a storm brought down power lines, causing a five-hour outage for 4,000 people.

Reported power outages by cause







Nebraska

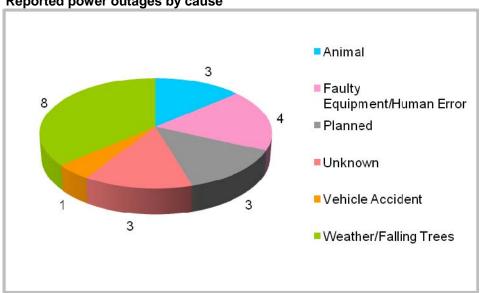
Outage summary

Total number of people affected by outages	60,637
Total duration of outages	810 minutes (13.5 hours)
Total number of outages	22
Average number of people affected per outage	5,512
Average duration of outage	162 minutes (over 2.5 hours)

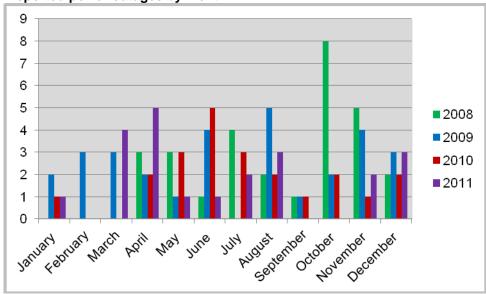
Note: Total number of people affected (and average) based on 11 (50%) of the total reported outages. Total duration of outages (and average) based on 5 (23%) of the total reported outages.

Outage fact: On March 16 equipment in a substation failed, cutting power to 11,300 residents of Omaha for three hours.

Reported power outages by cause



Reported power outages by month



Nevada

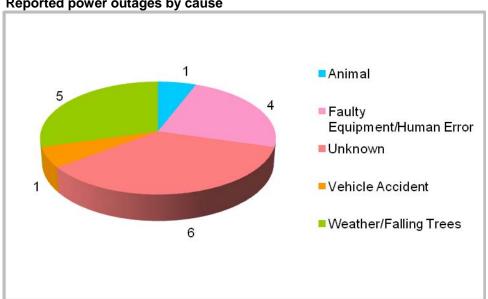
Outage summary

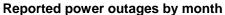
Total number of people affected by outages	46,485
Total duration of outages	525 minutes (over 8.5 hours)
Total number of outages	17
Average number of people affected per outage	4,649
Average duration of outage	131 minutes (over 2 hours)

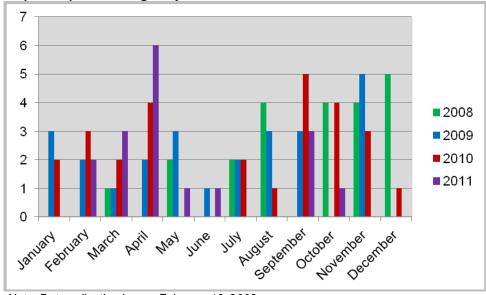
Note: Total number of people affected (and average) based on 10 (59%) of the total reported outages. Total duration of outages (and average) based on 4 (24%) of the total reported outages.

Outage fact: On May 9 an equipment failure at a substation caused a three-hour power interruption for 24,000 people in Gardnerville.

Reported power outages by cause







New Hampshire

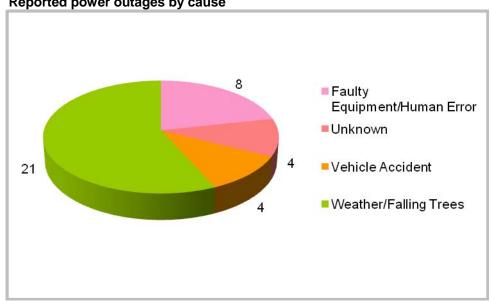
Outage summary

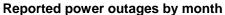
Total number of people affected by outages	314,550
Total duration of outages	390 minutes (6.5 hours)
Total number of outages	37
Average number of people affected per outage	12,582
Average duration of outage	195 minutes (over 3 hours)

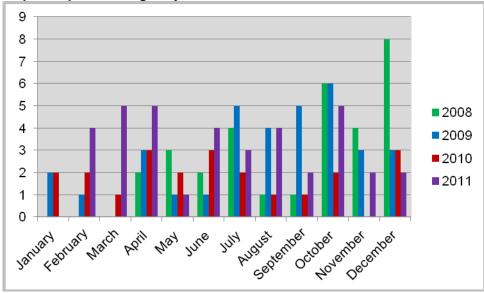
Note: Total number of people affected (and average) based on 25 (68%) of the total reported outages. Total duration of outages (and average) based on 2 (5%) of the total reported outages.

Outage fact: On February 19 strong winds knocked out power for 20,000 people in the Rochester area.

Reported power outages by cause







New Jersey

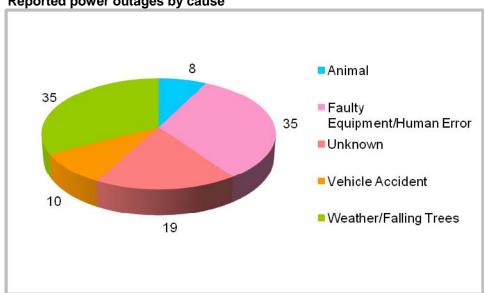
Outage summary

- uning - unining	
Total number of people affected by outages	1,535,103
Total duration of outages	2,500 minutes (over 41 hours)
Total number of outages	107
Average number of people affected per outage	23,259
Average duration of outage	125 minutes (over 2 hours)

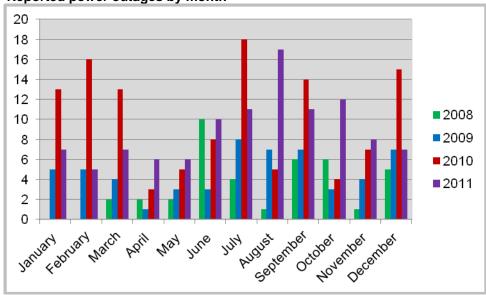
Note: Total number of people affected (and average) based on 66 (62%) of the total reported outages. Total duration of outages (and average) based on 20 (19%) of the total reported outages.

Outage fact: On October 29 an early snowstorm caused outages for 200,000 people in the River Dell area.

Reported power outages by cause



Reported power outages by month



New Mexico

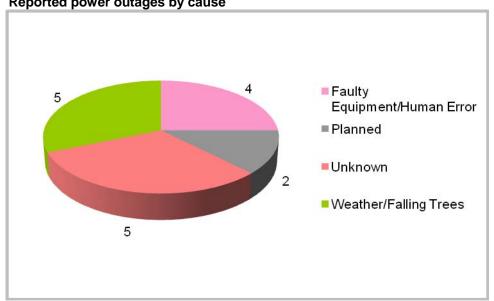
Outage summary

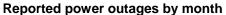
Total number of people affected by outages	169,743
Total duration of outages	780 minutes (13 hours)
Total number of outages	16
Average number of people affected per outage	18,860
Average duration of outage	195 minutes (over 3 hours)

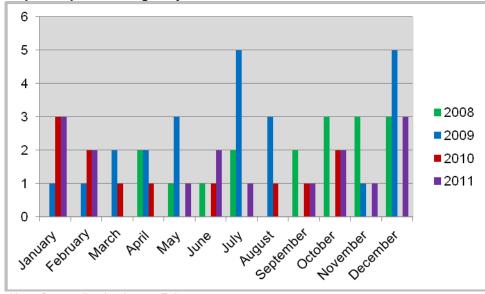
Note: Total number of people affected (and average) based on 9 (56%) of the total reported outages. Total duration of outages (and average) based on 4 (25%) of the total reported outages.

Outage fact: On July 13 a rain storm caused a power outage for 12,000 residents of Las Cruces.

Reported power outages by cause







New York

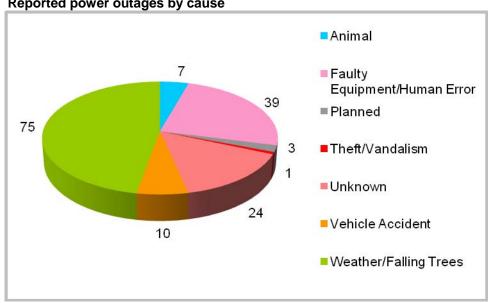
Outage summary

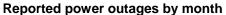
- uning - unining	
Total number of people affected by outages	10,918,400
Total duration of outages	2,654 minutes (over 44 hours)
Total number of outages	159
Average number of people affected per outage	94,124
Average duration of outage	166 minutes (over 2.5 hours)

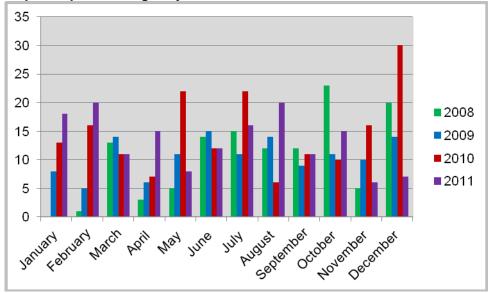
Note: Total number of people affected (and average) based on 116 (73%) of the total reported outages. Total duration of outages (and average) based on 16 (10%) of the total reported outages.

Outage fact: On August 28 Hurricane Irene hit New York City, knocking out power for more than one million people.

Reported power outages by cause







North Carolina

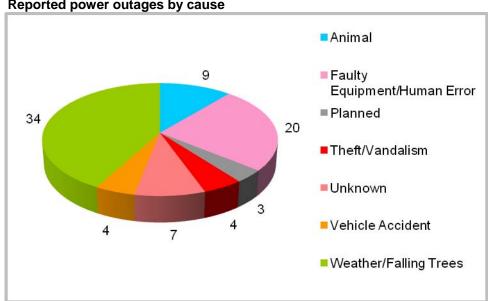
Outage summary

- uning - unining	
Total number of people affected by outages	1,075,314
Total duration of outages	2,270 minutes (over 37.5 hours)
Total number of outages	81
Average number of people affected per outage	19,913
Average duration of outage	162 minutes (over 2.5 hours)

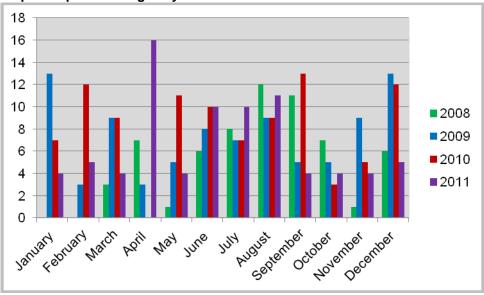
Note: Total number of people affected (and average) based on 54 (67%) of the total reported outages. Total duration of outages (and average) based on 14 (17%) of the total reported outages.

Outage fact: On April 16 devastating tornadoes cut power for 100,000 people in Raleigh.

Reported power outages by cause



Reported power outages by month



North Dakota

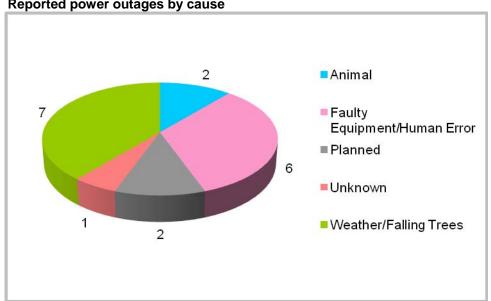
Outage summary

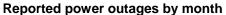
Total number of people affected by outages	107,900
Total duration of outages	1,075 minutes (nearly 18 hours)
Total number of outages	18
Average number of people affected per outage	13,488
Average duration of outage	179 minutes (nearly 3 hours)

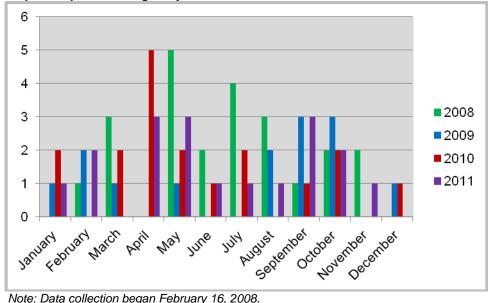
Note: Total number of people affected (and average) based on 8 (44%) of the total reported outages. Total duration of outages (and average) based on 6 (33%) of the total reported outages.

Outage fact: On November 8 a pheasant tried to perch on a power line and caused a short that knocked out power for an hour for 7,700 residents of Dickinson.

Reported power outages by cause







Ohio

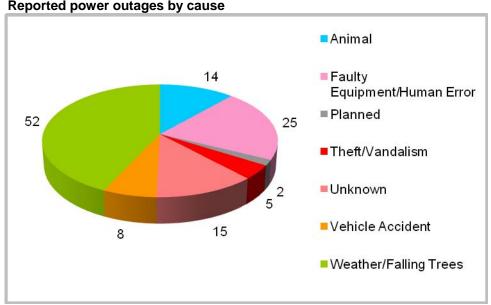
Outage summary

Total number of people affected by outages	782,544
Total duration of outages	2,351 minutes (over 39 hours)
Total number of outages	121
Average number of people affected per outage	9,316
Average duration of outage	181 minutes (just over 3 hours)

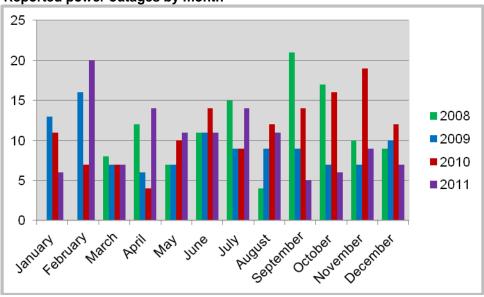
Note: Total number of people affected (and average) based on 84 (69%) of the total reported outages. Total duration of outages (and average) based on 13 (11%) of the total reported outages.

Outage fact: On February 4 an ice storm caused outages for nearly 64,000 people in Stark.

Reported power outages by cause







Oklahoma

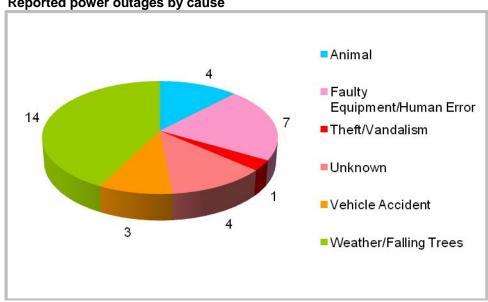
Outage summary

Total number of people affected by outages	95,612
Total duration of outages	382 minutes (over 6 hours)
Total number of outages	33
Average number of people affected per outage	4,157
Average duration of outage	76 minutes

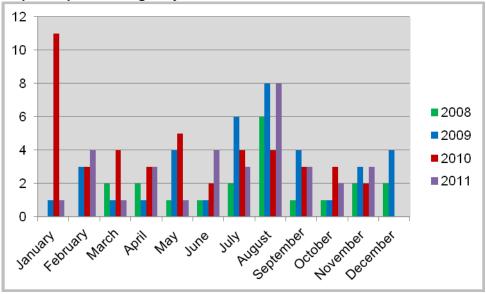
Note: Total number of people affected (and average) based on 23 (70%) of the total reported outages. Total duration of outages (and average) based on 5 (15%) of the total reported outages.

Outage fact: On July 31 copper thieves caused a four-hour outage for 8,100 residents of Tulsa.

Reported power outages by cause



Reported power outages by month



Oregon

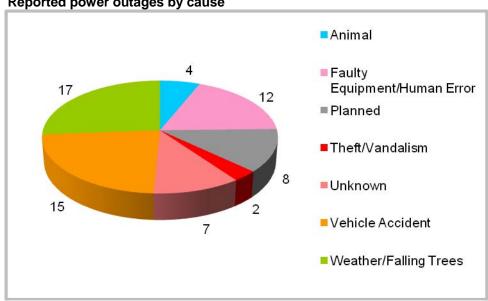
Outage summary

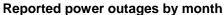
Total number of people affected by outages	400,609
Total duration of outages	4,980 minutes (nearly 3.5 days)
Total number of outages	65
Average number of people affected per outage	8,176
Average duration of outage	208 minutes (nearly 3.5 hours)

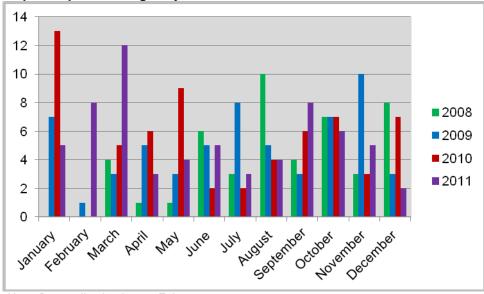
Note: Total number of people affected (and average) based on 49 (75%) of the total reported outages. Total duration of outages (and average) based on 24 (37%) of the total reported outages.

Outage fact: On March 13 a powerful storm hit the Salem area, knocking out power for 79,000 people.

Reported power outages by cause







Pennsylvania

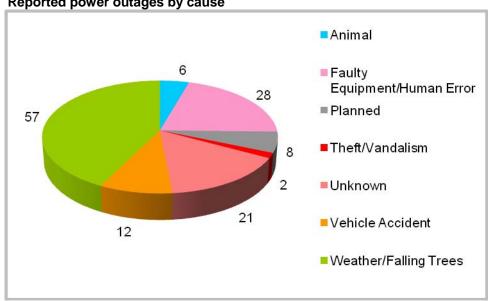
Outage summary

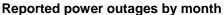
- uning - unining	
Total number of people affected by outages	1,425,656
Total duration of outages	18,772 minutes (over 13 hours)
Total number of outages	134
Average number of people affected per outage	18,046
Average duration of outage	1,173 minutes (over 19.5 hours)

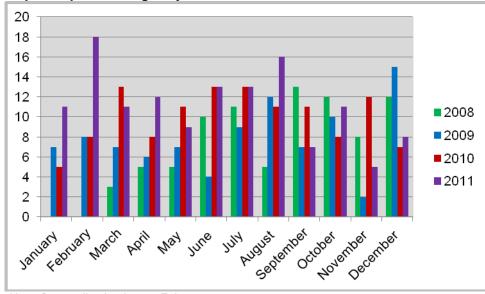
Note: Total number of people affected (and average) based on 79 (59%) of the total reported outages. Total duration of outages (and average) based on 16 (12%) of the total reported outages.

Outage fact: On October 29 a major snowstorm hit York, causing a power interruption for 45,000 people.

Reported power outages by cause







Rhode Island

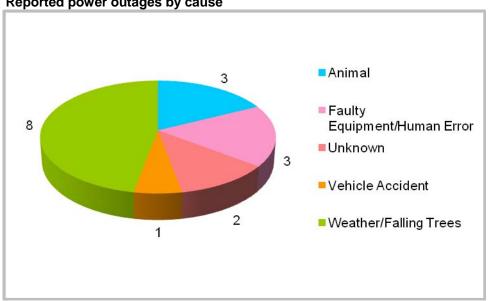
Outage summary

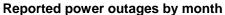
Total number of people affected by outages	543,865
Total duration of outages	160 minutes (over 2.5 hours)
Total number of outages	17
Average number of people affected per outage	67,983
Average duration of outage	80 minutes

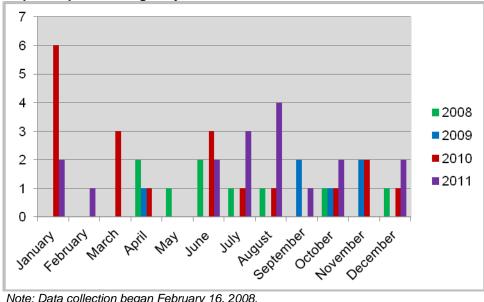
Note: Total number of people affected (and average) based on 8 (47%) of the total reported outages. Total duration of outages (and average) based on 2 (12%) of the total reported outages.

Outage fact: On August 28 Hurricane Irene knocked down trees and power lines, cutting power to 500,000 people in the Providence area.

Reported power outages by cause







South Carolina

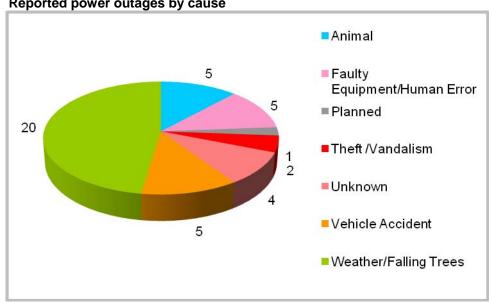
Outage summary

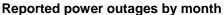
Total number of people affected by outages	108,126
Total duration of outages	580 minutes (over 9.5 hours)
Total number of outages	42
Average number of people affected per outage	4,915
Average duration of outage	97 minutes (over 1.5 hours)

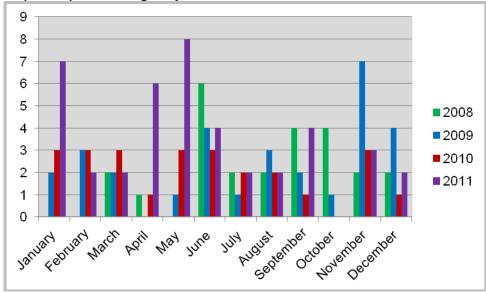
Note: Total number of people affected (and average) based on 22 (52%) of the total reported outages. Total duration of outages (and average) based on 6 (14%) of the total reported outages.

Outage fact: On June 15 a crow got into some wiring causing an outage for 3,000 people in Rock Hill. The previous month, a snake caused an outage in the same area.

Reported power outages by cause







South Dakota

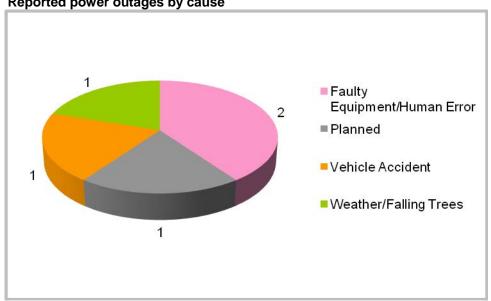
Outage summary

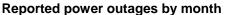
Total number of people affected by outages	18,352
Total duration of outages	90 minutes (1.5 hours)
Total number of outages	5
Average number of people affected per outage	4,588
Average duration of outage	90 minutes (1.5 hours)

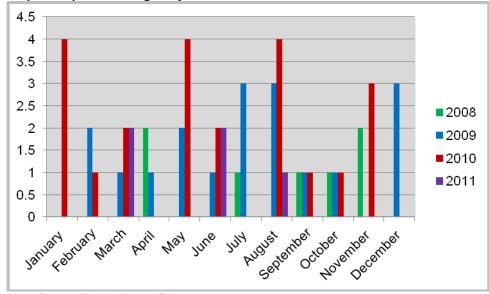
Note: Total number of people affected (and average) based on 4 (80%) of the total reported outages. Total duration of outages (and average) based on 1 (20%) of the total reported outages.

Outage fact: On June 24 severe weather caused power outages for 6,000 people in the Rapid City area.

Reported power outages by cause







Tennessee

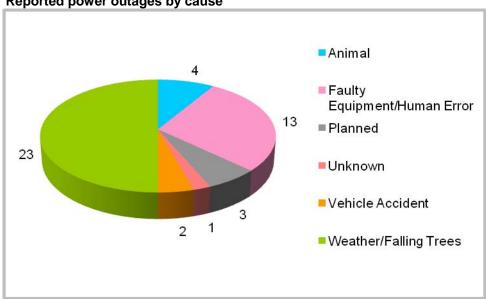
Outage summary

- uning - unining	
Total number of people affected by outages	472,902
Total duration of outages	1,967 minutes (over 32.5 hours)
Total number of outages	46
Average number of people affected per outage	16,307
Average duration of outage	281 minutes (over 4.5 hours)

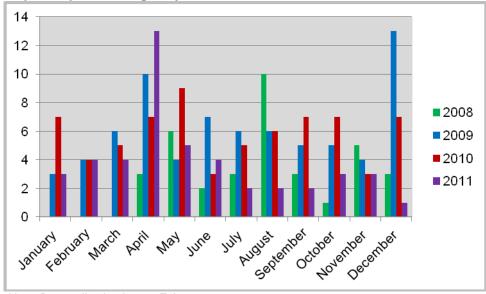
Note: Total number of people affected (and average) based on 29 (63%) of the total reported outages. Total duration of outages (and average) based on 7 (15%) of the total reported outages.

Outage fact: On April 4 strong winds brought down trees and power lines, disrupting power for 130,000 people in the Memphis area.

Reported power outages by cause



Reported power outages by month



Texas

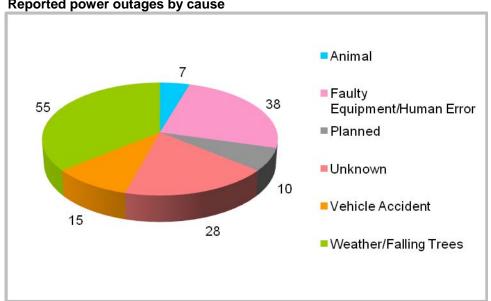
Outage summary

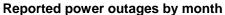
- uning - unining	
Total number of people affected by outages	802,269
Total duration of outages	2,175 minutes (over 36 hours)
Total number of outages	153
Average number of people affected per outage	10,155
Average duration of outage	95 minutes (over 1.5 hours)

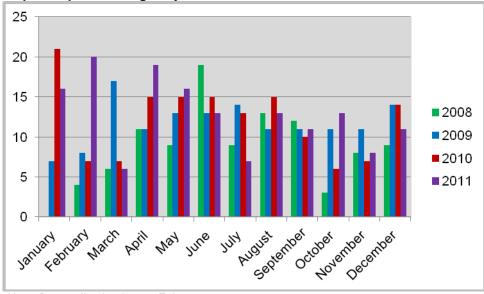
Note: Total number of people affected (and average) based on 79 (52%) of the total reported outages. Total duration of outages (and average) based on 23 (15%) of the total reported outages.

Outage fact: On October 1 a boat being towed on a trailer got tangled in a cable and pulled down power lines causing an outage for 1,000 people in San Leon.

Reported power outages by cause







Utah

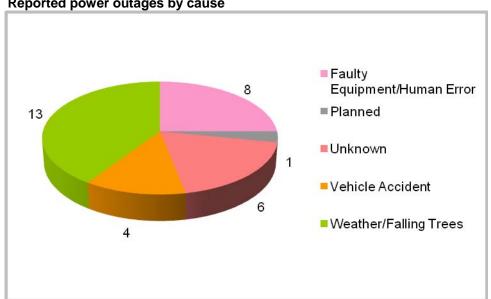
Outage summary

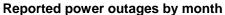
Total number of people affected by outages	547,021
Total duration of outages	3,236 minutes (nearly 54 hours)
Total number of outages	32
Average number of people affected per outage	23,784
Average duration of outage	231 minutes (over 3.5 hours)

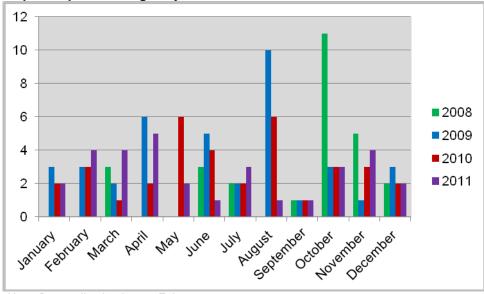
Note: Total number of people affected (and average) based on 23 (72%) of the total reported outages. Total duration of outages (and average) based on 14 (44%) of the total reported outages.

Outage fact: On April 3 a spring snowstorm caused a power outage for 29,000 people in the Salt Lake City area.

Reported power outages by cause







Vermont

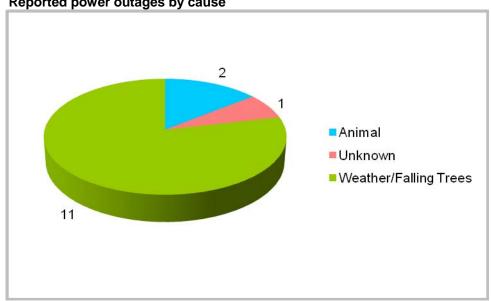
Outage summary

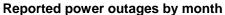
Total number of people affected by outages	74,030
Total duration of outages	138 minutes (over 2 hours)
Total number of outages	14
Average number of people affected per outage	6,169
Average duration of outage	69 minutes

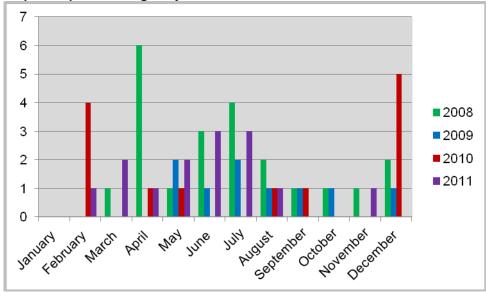
Note: Total number of people affected (and average) based on 12 (86%) of the total reported outages. Total duration of outages (and average) based on 2 (14%) of the total reported outages.

Outage fact: On June 25 birds damaged an electrical switch on a utility pole knocking out power for 2,330 people in Burlington.

Reported power outages by cause







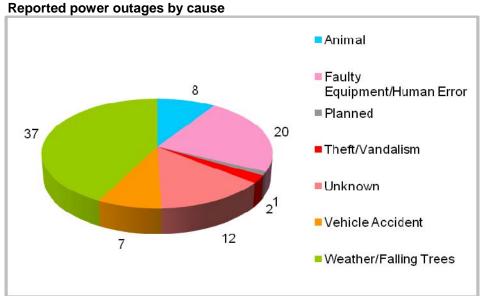
Virginia

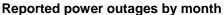
Outage summary

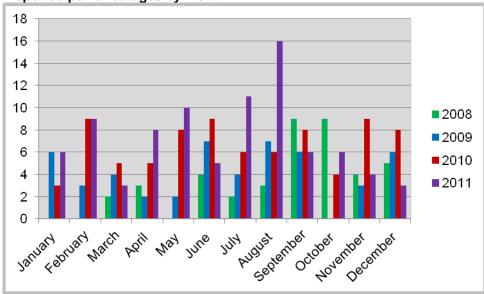
- uning - unining	
Total number of people affected by outages	1,543,313
Total duration of outages	1,972 minutes (nearly 33 hours)
Total number of outages	87
Average number of people affected per outage	27,559
Average duration of outage	152 minutes (just over 2.5 hours)

Note: Total number of people affected (and average) based on 56 (64%) of the total reported outages. Total duration of outages (and average) based on 13 (15%) of the total reported outages.

Outage fact: On December 20 thieves risked their lives and stole copper wire from a transformer and caused a 165-minute outage for 2,400 people in Roanoke.







Washington

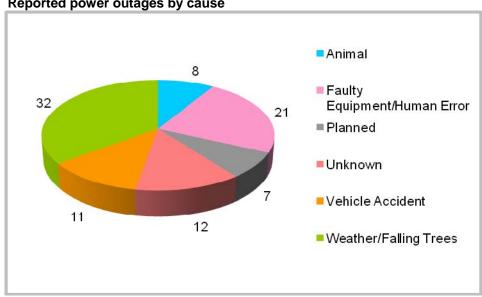
Outage summary

Total number of people affected by outages	251,436
Total duration of outages	3,669 minutes (over 2.5 days)
Total number of outages	91
Average number of people affected per outage	4,122
Average duration of outage	167 minutes (over 2.5 hours)

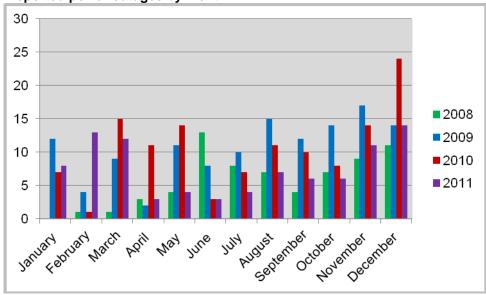
Note: Total number of people affected (and average) based on 61 (67%) of the total reported outages. Total duration of outages (and average) based on 22 (24%) of the total reported outages.

Outage fact: On April 30 strong winds blew a trampoline into a substation causing a sixhour power outage for 11,000 residents of Spokane.

Reported power outages by cause



Reported power outages by month



West Virginia

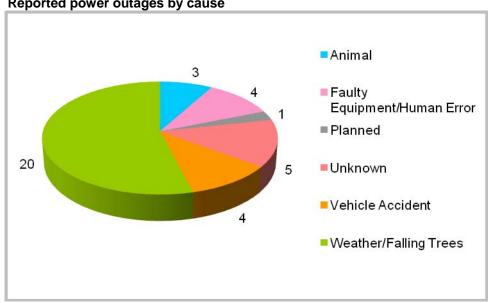
Outage summary

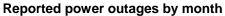
_ c arrange c arrantan j	
Total number of people affected by outages	195,732
Total duration of outages	711 minutes (over 11.5 hours)
Total number of outages	37
Average number of people affected per outage	8,156
Average duration of outage	142 minutes (over 2 hours)

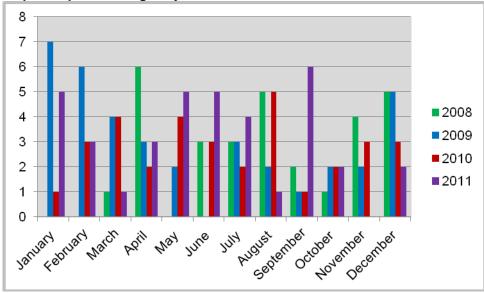
Note: Total number of people affected (and average) based on 24 (65%) of the total reported outages. Total duration of outages (and average) based on 5 (14%) of the total reported outages.

Outage fact: On May 18 a mudslide knocked down power lines and caused a power outage for 700 people in Huntington.

Reported power outages by cause







Wisconsin

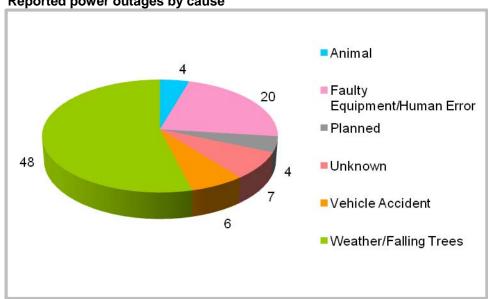
Outage summary

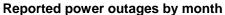
Total number of people affected by outages	445,052
Total duration of outages	13,153 minutes (over 9 days)
Total number of outages	89
Average number of people affected per outage	7,296
Average duration of outage	598 minutes (nearly 10 hours)

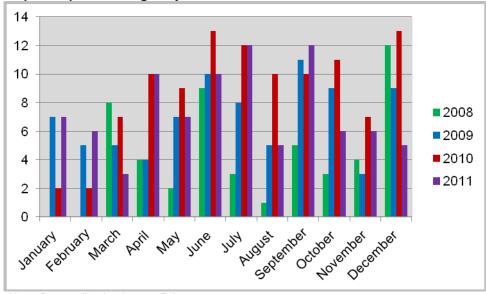
Note: Total number of people affected (and average) based on 61 (69%) of the total reported outages. Total duration of outages (and average) based on 22 (25%) of the total reported outages.

Outage fact: On September 2 severe thunderstorms caused a power outage for 65,000 people in the Appleton area.

Reported power outages by cause







Wyoming

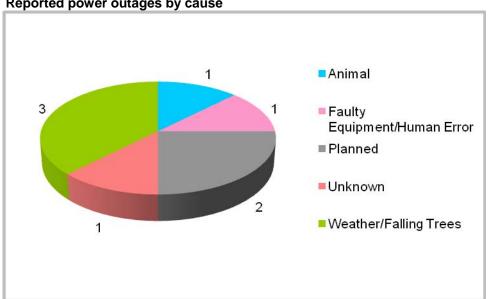
Outage summary

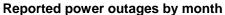
Total number of people affected by outages	9,200
Total duration of outages	491 minutes (over 8 hours)
Total number of outages	8
Average number of people affected per outage	3,067
Average duration of outage	123 minutes (just over 2 hours)

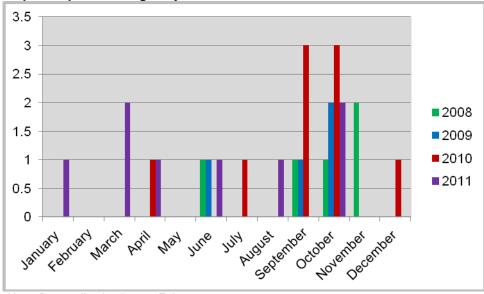
Note: Total number of people affected (and average) based on 3 (38%) of the total reported outages. Total duration of outages (and average) based on 4 (50%) of the total reported outages.

Outage fact: On August 8 a raven got into a substation triggering a two-hour power outage for 1,600 residents of Worland.

Reported power outages by cause









UNITED STATES 8609 Six Forks Road Raleigh, NC 27615 U.S.A. Toll Free: 1.800.356.5794

eaton.com/blackouttracker



Eaton and PowerChain Management are trademarks of Eaton Corporation All other trademarks are property of their respective owners.

©2012 Eaton Corporation All Rights Reserved Printed in USA COR173FXA February 2012