



U.S. Department of Energy
Office of Electricity Delivery & Energy Reliability

Hurricane Irene Situation Report #11

August 31, 2011 (3:00 PM EDT)

http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx

Highlights:

- Hurricane Irene made landfall on Puerto Rico as a Category 1 hurricane on Monday August 22 and landfall near Cape Lookout, NC as a Category 1 hurricane at 8:00 am EDT August 27.
In response to Irene the following States declared a State of Emergency: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Vermont, and Virginia.

Electricity Information:

Electricity Outages by State

Table with 5 columns: Impacted State, Current Customer Outages, % of State Customers Without Power, Peak Outages Reported in DOE SitRep(s), Customers Restored Since Peak. Rows include Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Vermont, Virginia, and a TOTAL row.

Note: Due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

Sources:

Outages obtained from company web sites and DOE communications.

Total State customers are based on 2009 EIA Customer Data.

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- As of 1:00 pm EDT August 31, the impacted States report a total of 1,722,712 customers without power. This is a decrease from the 1,837,279 reported as of 8:00 am EDT August 31 in Situation Report #10. Restoration estimates and efforts by electric utilities are reported below.
- Calvert Cliffs Nuclear Power Plant Unit 1 resumed operations on August 31. The unit tripped on Saturday, August 27, when a large piece of siding blew off the building and hit a main transformer.

Petroleum & Natural Gas Information:

- In the Northeast, the ConocoPhillips has begun restarting its Linden, NJ refinery and two refineries are operating at reduced rates (Sunoco, Marcus Hook, PA and Philadelphia, PA). The ConocoPhillips refinery in Trainer, PA and PBF refineries in Paulsboro, NJ and Delaware City, DE have returned to normal operations.

Refineries in the Path of Irene as of 8/31/11 1:00 PM EDT							
Refinery Impacted	Location	Capacity (B/D)	Capacity (B/D)				
			Normal Operations	Shut Down	Restarting	Reduced Rates	Back to Normal
ConocoPhillips	Linden, NJ	238,000			238,000		
ConocoPhillips	Trainer, PA	185,000					185,000
Sunoco	Marcus Hook, PA	178,000				178,000	
Sunoco	Philadelphia, PA	335,000				335,000	
PBF (formerly Valero)	Paulsboro, NJ	160,000					160,000
PBF (formerly Valero)	Delaware City, DE	182,200					182,200
TOTAL		1,278,200	0	0	238,000	513,000	527,200

Note: The table does not include asphalt refineries or facilities already closed in prior years.

Sources: Confirmed by company or on company web site. Various trade press sources.

- The current status of pipeline operations in the Northeast is summarized in the following table.

Pipelines in the Path of Irene as of 8/31/11 1:00 PM EDT							
Type	Name	Start	Terminus	Capacity (barrels/day)	Shut Down	Reduced Rates	Operating
Product	Colonial	TX	NJ	2,400,000			2,400,000
Product	KinderMorgan/Plantation	LA	VA	600,000			600,000 ^A
LPG	Enterprise Products Partners (TEPPCO)	TX	PA	330,000			330,000 ^B
LPG	Enterprise Products Partners (Dixie)	TX	VA	100,000			100,000
Product	Buckeye Eastern Products System	NJ	PA, NY	900,000			900,000 ^C
Crude oil	Portland Pipe Line	ME	Quebec	410,000	410,000 ^D		

A = Plantation line resumed normal operations on all pipeline segments.

B = TEPPCO pipeline segments A-3, A-4, A-5 (all in PA) were isolated on August 26, and back to full operating capacity on August 30.

C = Buckeye lines returned to near normal operations on August 29.

D = Portland-Montreal 24" main line was isolated and shut down before storm; the pipeline is expected to begin operating at reduced rates on August 31.

- The current status of terminals reporting as shut down is summarized in the following table.



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Impacted Terminals in the Path of Irene as of 8/31/11 1:00 PM EDT

Table with 4 columns: Company Name, Location, Shut Down Date, Restart Date. Rows include ConocoPhillips, Enterprise Products Partners, ExxonMobil, Magellan Midstream Partners, Motiva Enterprises, and NuStar.

Est. = estimated, exp. = expected

Sources: Confirmed by company or on company web site. Various trade press sources.

- The U.S. Coast Guard reports that Baltimore, North Carolina, Philadelphia (Delaware Bay), New York City, New Jersey, Virginia (Hampton Roads), Long Island Sound, Boston, and Providence are all open.

Electricity Restoration Activities by State:

Connecticut:



- The United Illuminating Company (UI) reported today (August 31) that it estimates it will restore power to 94 percent of the affected customers by the weekend. UI has crews in from Florida, Missouri, North Carolina, Wisconsin, and Indiana and in total there are 240 crews working. Connecticut Light & Power (CL&P) reported August 29 that it could be a week or more before all of its customers are restored.

Delaware



- DELMARVA Power expects to complete the restoration by noon Thursday (September 1), with the vast majority restored by midnight today (August 31).



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District of Columbia:



- Pepco, serving D.C. and Maryland, continues to estimate that it will restore service to all of their customers by Thursday evening (September 1). **Pepco has dispatched more than 1,400 line-restoration personnel to remaining localized areas without power.**

Maine:



- **Central Maine Power Company (CMP) stated on August 31 that additional crews have arrived from northern Maine, New Hampshire and New Brunswick, Canada to assist in the restoration effort. CMP has nearly 160 tree crews and 285 repair crews working to restore power. The company expects to complete all storm repairs by late Thursday night (September 1).**

Maryland:



- Baltimore Gas and Electric Company (BGE) continues to expect to restore service to the vast majority of customers to by late Friday (September 2), with some scattered outages extending into Saturday (September 3). BGE has more than 5,000 employees, contractors, and out-of-state linemen working on restoration today (August 31).
- Pepco, serving D.C. and Maryland, continues to estimate that it will restore service to all of their customers by Thursday evening (September 1). **Pepco has dispatched more than 1,400 line-restoration personnel to remaining localized areas without power.**

Massachusetts:



- National Grid reported that **full restoration to all communities is expected by Sunday, September 3. A detailed county listing with estimated restoration times is posted on their website.** The company has 3,500 restoration and support personnel supporting its response effort.
- NSTAR estimated today (August 31) that all customers will be restored by 10:00 pm Saturday (September 3). A list of expected restoration times by community is posted on their website.
- **Western Massachusetts Electric Company (WMECo) has completed restoration to all of its customers affected by Irene. WMECo had more than 100 line crews and 50 tree crews working to repair the damage.**

New Hampshire:



- Public Service of New Hampshire (PSNH) estimates that it will restore power to 99 percent of its customers by midnight tonight (August 31). The company's 120 line and contract crews already in place were joined by another 100 additional contract crews yesterday (August 30) from as far away as Tennessee, Missouri, and Ohio.

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- New Hampshire Electric Co-op (NHEC) estimated that all affected customers will be restored by noon today (August 31). NHEC had 165 people in the field and an additional 25 were to arrive yesterday (August 30) from Pennsylvania. NHEC crews have been joined in the field by utility crews from five Massachusetts municipal electric companies and four private utility construction companies.

New Jersey:



- Jersey Central Power and Light (JCP&L) continues to estimate that the majority of their customers will be restored by the weekend with full restoration by early next week. JCP&L has more than 4,000 employees assisting with restoration.
- Public Service Electric & Gas (PSE&G) expects complete restoration of customers in Bergen, Hudson, Essex, Passaic, Burlington, Camden, Gloucester and Mercer counties by Friday (September 2). In the central NJ counties of Union, Middlesex, and Somerset affected by flooding PSE&G expects to restore service to all customers by Sunday (September 4). PSE&G has 6,000 employees supporting the restoration effort, including including crews from Wisconsin, West Virginia, Florida, Missouri, Ohio, Pennsylvania, and Tennessee.
- **Atlantic City Electric expects to restore the vast majority of its customers affected by midnight Thursday (September 1) and estimated it will all customers restored by midnight Friday (September 2). Flooded roads in southern New Jersey have been an issue, impeding the ability to r move crews and equipment throughout the region. Hundreds of Atlantic City Electric and mutual assistance crews are working to restore customers.**
- **Orange & Rockland (O&R) reported that most customers should be restored by by midnight Friday (September 2), with the remaining restored over the weekend.** More than 180 O&R, contractor and mutual aid crews from as far as Michigan and Texas are assessing damage and conducting system repairs.

New York:



- National Grid expects to restore power to customers in Troy by the afternoon of August 30, to customers in Hudson and Saratoga by noon August 31 and the remaining customers by midnight Thursday (September 1). The company reports more than 3,000 people are dedicated to the effort and as of August 30, National Grid has line crews (249 company, 352 out-of-state) and tree crews (215 company) dedicated to the effort.
- **Orange & Rockland (O&R) reported that most customers should be restored by by midnight Friday (September 2), with the remaining restored over the weekend.** More than 180 O&R, contractor and mutual aid crews from as far as Michigan and Texas are assessing damage and conducting system repairs.
- Con Edison, serving New York City and surrounding area, expected New York City customers to be restored late August 30 and most customers in Westchester County to be restored by late Thursday (September 1). As of August 30, ConEd had line crews (144 company, 135 out-of-state), tree crews (127 out-of-state), service crews (101 company) working to restore power..



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- Long Island Power Authority (LIPA) reported 95% restoration is expected by midnight Friday September 2. LIPA has line crews (154 company, 341 out-of-state), tree crews (80 company, 161 out-of-state), service crews (274 company) and others deployed totaling 2,300 restoration personnel across Long Island.
- Central Hudson Gas and Electric Corporation reports that most of their outages are in the hardest-hit counties of Ulster, Albany and Greene, where restoration work has been hampered by severe flooding, impassable roadways and infrastructure destruction. The company estimates the majority of the customers in Columbia, Dutchess, Orange, and Putnam counties will be restored by today (August 31), while customers in Ulster and Greene counties can expect to be restored by Sunday (September 4). A workforce of line crews (55 company, 43 out-of-state), tree crews (41 out-of-state) and service crews (19 company, 12 out-of-state) is working to restore electricity.
- New York Service Gas and Electric (NYSEG) reports 90% restoration is expected by Friday (September 2), with the exception of the Oneonta area. NYSEG has line crews (149 company, 60 out-of-state) and tree crews (224 out-of-state) working to restore power.

North Carolina:



- Dominion Virginia Power stated that they are on track to restore 75 percent of affected customers by tonight (August 31) and 90-95 percent by Friday (September 2). **Nearly all remaining customers will have service restored by Saturday night (September 3).** The company plans to have estimated restoration times for individual customers today (August 31).
- Progress Energy is aiming to restore power to 99 percent of affected customers by midnight tonight (August 31).

Pennsylvania:



- Met-Ed estimates that the majority of their customers should be restored by midnight Friday (September 2).
- Pike County Power reports that the remaining customers out are located predominantly in the Matamoras area. The utility estimates that restoration will be completed by Friday (September 2) evening or Saturday (September 3) morning, depending on further damage assessments.
- PECO, serving southeastern Pennsylvania, reports that more than 4,000 workers are working on restoration, and expects most customers to be restored tonight (August 31). Service for a small number of customers with more extensive damage will be restored by the weekend.
- Penelec estimates that restoration is expected by midnight tonight (August 31).
- PPL has more than 2,300 employees and contractors involved in the restoration effort. The company was estimating 3 to 5 days to restore substantially all customers. PPL reported that it has 18 miles of power lines to replace, in addition to 900 damaged poles, 700 insulators, and 4,638 fuses to fix.
- **UGI Electric reported August 31 that due to the extent of the damage, customers should be prepared to be without power for an extended period, possibly into early next week in the most difficult-to-reach areas. UGI has 15 crews made up of more than 100 field team members plus additional support staff working on restoring power to affected communities.**



Rhode Island:



- National Grid reported that **full restoration to all communities is expected by Sunday, September 3. A detailed county listing with estimated restoration times is posted on their website.** The company has 3,500 restoration and support personnel supporting its response effort.

Virginia:



- Dominion Virginia Power stated that they are on track to restore 75 percent of affected customers by tonight (August 31) and 90-95 percent by Friday (September 2). The company plans to have estimated restoration times for individual customers today (August 31).

Vermont:



- **Central Vermont Public Service (CVPS) stated today (August 31) that complete restoration could take weeks due to areas being inaccessible. In areas that crews can get to, restoration would likely take days. The company has hundreds of crews from as far away as Illinois, Missouri, Texas, and Ontario assisting CVPS's crews.**

ESF 12 Actions:

- ESF 12 is staffing the FEMA National Response Coordination Center (NRCC) in Washington, DC, the Region I Regional Response Coordination Center (RRCC) in Boston, MA, the Region II RRCC in New York, NY, and the Joint Field Office (JFO) in Albany, NY. ESF 12 staff are staffing the Maryland Emergency Operations Center (EOC) ESF 12 staff are coordinating restoration activities with the State of Connecticut. ESF 12 has been demobilized from the Region III RRCC in Philadelphia, PA. **ESF 12 will be demobilizing from the Region IV RRCC in Atlanta, GA and from the Virginia EOC this evening.**