



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

Hurricane Irene Situation Report #3

August 27, 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. As of 2:00 pm EDT (August 27), the National Hurricane Center (NHC) reports Hurricane Irene is a Category 1 hurricane with maximum sustained winds of 85 mph. The storm is moving to the north-northeast at 15 mph and is presently 120 miles south of Norfolk, Virginia. Tropical storm forces winds extend outward up to 260 miles from Irene's eye. Irene is expected to remain a hurricane as it moves towards the Northeast.
As of August 27, the following States have declared a State of Emergency: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Rhode Island, Vermont, and Virginia.

Electricity Information:

Electricity Outages by State

Table with 3 columns: Impacted State, Electric Customer Outages, % of State Customers Without Power. Rows include District of Columbia, Delaware, Maryland, North Carolina, South Carolina, 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.

- As of 1:00 pm EDT August 27, the impacted States report a total of 525,910 customers without power. This is an increase from the 219,633 reported this morning in Situation Report #2. Preparation and restoration efforts by electric utilities are reported below.
Nuclear power plants along the coast have implemented Severe Weather Procedures and are monitoring the storm. If winds are high enough (typically above 90 mph), then nuclear units may be shut down.



**Petroleum & Natural Gas Information:**

- According to the Energy Information Administration (EIA), as of Friday, August 19, East Coast (PADD 1) inventories for gasoline (55 million barrels) and distillate fuel (61.5 million barrels) are at about their 5-year average levels. Crude oil inventories (11.6 million barrels) are 18 percent below their 5-year average, but this is partially due to fewer inventories being needed as a result of the shutdown of Eagle Point and Yorktown refineries. Gulf Coast (PADD 3) gasoline, distillate fuel, and crude oil inventories are all well above their 5-year average.
- **All refineries on the East Coast are operating at normal or slightly reduced rates.**

Refineries in the Path of Irene as of 8/27/11 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				180,000	
ConocoPhillips	Trainer, PA	185,000				150,000	
Sunoco	Marcus Hook, PA	178,000	178,000				
Sunoco	Philadelphia, PA	335,000	335,000				
PBF (formerly Valero)	Paulsboro, NJ	160,000				140,000	
PBF (formerly Valero)	Delaware City, DE	182,200	182,200				
<b>TOTAL</b>		<b>1,278,200</b>	<b>695,200</b>	<b>0</b>	<b>0</b>	<b>470,000</b>	<b>0</b>

**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 8/27/11 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
Product	Enterprise Products Partners (TEPPCO)	PA	PA	330,000			
LPG	Enterprise Products Partners (Dixie)	TX	VA	100,000	A		
Product	Buckeye	NJ	PA, NY	N/A	B		

A = pipeline segments A-3, A-4, A-5 (all in PA) isolated on 8/26/11 pending inspection following hurricane passage

B = Lines running NJ-to-PA, PA-to-NY, and intrastate ME.

- **Colonial Pipeline reported that mainline operations from Houston into the Northeast are continuing as normal. Power outages in coastal areas caused some of segments of the pipeline in those coastal markets to be curtailed.**
- **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 8/27/11 1:00 PM EDT

Table with 4 columns: Company Name, Location, Shut Down Date, and Restart Date. Rows include companies like Buckeye Partners, ExxonMobil, KinderMorgan, Magellan Midstream Partners, Motiva Enterprises, and NuStar.

exp. = expected

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

- NuStar plans to keep its Paulsboro, NJ terminal open as long as the PBF (formerly Valero) refinery remains operational.
The U.S. Coast Guard has shut all ports in North Carolina and Virginia. The ports of Baltimore and Long Island Sound will close today (August 27). No vessels may enter Philadelphia port.

Electricity Restoration Activities:

- Progress Energy Carolinas crew of 1,000 line workers, tree crews and support staffs from five States are conducting damage assessment and are prepared to begin large-scale repairs as soon as weather conditions permit.
Dominion Virginia Power and Dominion North Carolina Power report that they do not plan to de-energize lines during the storm.
Rappahannock Electric Cooperative (REC), servicing 22 Virginia counties, has arranged mutual aid to assist in power restoration as quickly and safely as possible.
Baltimore Gas and Electric (BG&E) has more than 3,800 employees, contractors, and out-of-State linemen in place to assist with widespread customer outages from Hurricane Irene's impacts.

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- PECO, serving southeastern Pennsylvania, has placed all available crews and personnel on stand-by and has arranged for supplemental support from PECO's Chicago-based, sister utility ComEd, and other available crews from regions not affected by Irene.
- Con Edison, serving New York City and surrounding area, will evaluate the possibility of preemptively shutting down critical facilities, such as substations, in low-lying areas as a precaution to prevent severe damage to sensitive equipment that would prolong restoration if the storm knocks out power. Con Edison will also assess the feasibility of shutting off gas and steam mains that could become flooded. The utility has made arrangements to secure 400 crews from other utilities to assist with service restoration and to immediately begin assessing damage once the storm has passed.
- New York Public Service Commission reports utilities in New York are continuing to supplement internal crews with mutual aid. Combined, the investor owned electric utilities have secured over 770 external crews, of which approximately 360 will be used to support Con Edison's restoration activities. These figures do not include crews reporting to Long Island Power Authority. The crews have been secured from as far away as Colorado, Kansas, Texas, Mississippi, Wisconsin, Michigan, Illinois, and Indiana. Most crews are arriving today (August 27), ahead of the storm, to expedite restoration activities. In addition, Con Edison has supplemented its staffing with 205 damage assessors to survey the impact of the storm.
- Long Island Power Authority (LIPA) will have 2,500 line workers and tree trim personnel available throughout the weekend for emergency repair work.
- Pepco, serving D.C. and Maryland, has mobilized 1,000 personnel, including crews from as far away as Ohio Pennsylvania.
- In anticipation of Hurricane Irene, PJM is monitoring for the potential for individual nuclear units in its territory to be affected by high winds or high water levels. PJM is the regional transmission organization (RTO) that coordinates the movement of wholesale electricity in 13 States (including Delaware, Maryland, New Jersey, North Carolina, Pennsylvania, and Virginia) and the District of Columbia. PJM anticipates power reserves to be ample but if Irene causes units in its territory to reduce output the situation could change.
- National Grid, servicing customers in Massachusetts, New Hampshire, New York and Rhode Island, has activated its storm emergency plan bringing in extra crews, pre-staging crews and materials, and identifying flood-prone areas.
- Severe Weather Procedures have been initiated in New Jersey by Exelon/Amergen and in New York by Entergy.

**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, the Region III RRCC in Philadelphia, PA, and the Region IV RRCC in Atlanta, GA.