

Hurricane Sandy Situation Report # 19 November 6, 2012 (3:00 PM EST)

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

Highlights:

- At 8:00 pm EDT October 29, the National Hurricane Center reported Sandy made landfall near Atlantic City, NJ as a post tropical cyclone.
- As of 2:00 pm EST November 6, there are 930,783 customers without power in the affected States. 7,580,468 customers have been restored out of the 8,511,251 combined total peak outages reported in the Situation Reports for all 21 States affected. Restoration estimates and efforts by electric utilities are reported below.

Summary

| Electric Outages by State | | | | | | | | |
|---------------------------|--------------------------------|---|--|----------------------------------|--|--|--|--|
| Impacted State | Current Customer Outages | Percentage of Customers Without Power | Peak Outages Reported in DOE SitReps | Customers Restored Since Peak | | | | |
| Connecticut | 7,371 | < 1% | 626,559 | 619,188 | | | | |
| Maryland | 1,666 | < 1% | 311,020 | 309,354 | | | | |
| New Jersey | 537,089 | 14% | 2,615,291 | 2,078,202 | | | | |
| New York | 348,985 | 4% | 2,097,933 | 1,748,948 | | | | |
| Pennsylvania | 10,074 | < 1% | 1,267,512 | 1,257,438 | | | | |
| West Virginia | 25,598 | 3% | 271,765 | 246,167 | | | | |
| TOTAL: | 930,783 | | | | | | | |

Note: States with fewer than 1,000 outages are not included in the table. Due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive. Customer outages are representative of specific Situation Report reference dates and times. **Sources:** Outages obtained from company web sites and DOE communications. Total State customers are based on 2011 EIA Customer Data.

Yesterday (November 5) the Energy Information Administration (EIA) updated its report on the Retail Motor Gasoline Supply in the New York City Metropolitan Area. EIA estimated, based on an emergency survey of gasoline availability, that 24 percent of gas stations in the New York Metropolitan area do not have gasoline available for sale. This is a decrease from the 27 percent which EIA estimated did not have gasoline available for sale on November 4. The full results and the methodology can be found at:

http://www.eia.gov/special/disruptions/hurricane/sandy/gasoline_updates.cfm.

ESF 12 Actions:

• ESF 12 is staffing the FEMA National Response Coordination Center (NRCC) in Washington, DC; the FEMA Region II Regional Response Coordination Center (RRCC) in Colts Neck, NJ, the FEMA Interim Operation Facility in Hartford, CT, New Jersey State EOC in West Trenton, NJ, and the New York State EOC in Albany, NY.



Petroleum & Natural Gas Information: Refineries

• Phillips 66 reported yesterday (November 5) that it may be two to three weeks before its Bayway refinery (Linden, NJ) can resume normal operations due to the necessary replacement of electrical equipment damaged by saltwater.

| Refineries in the Path of Sandy as of 1:00 pm EST 11/6/12 | | | | | | | | |
|---|-------------------|---------------------|-----------|------------|-----------------|---------|--|--|
| | Location | Capacity (B/D) | | | | | | |
| Refinery | | Operating Capacity* | Shut Down | Restarting | Reduced Runs | Normal | | |
| Hess* | Port Reading, NJ | 70,000 | X | | | | | |
| Monroe Energy | Trainer, PA | 185,000 | | | | X | | |
| PBF | Delaware City, DE | 182,200 | | | | X | | |
| PBF | Paulsboro, NJ | 160,000 | | | | X | | |
| Philadelphia Energy Solutions (Sunoco) | Philadelphia, PA | 335,000 | | | X | | | |
| Phillips 66 | Linden, NJ | 238,000 | X | | | | | |
| TOTAL | | 1,170,200 | 308,000 | 0 | 335,000 | 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

Ports

• The Port of New York and New Jersey are open to all vessel transits with the exception of the Arthur Kill south of the Goethals Bridge. Yesterday (November 5), the Coast Guard reported that vessels may transit the Arthur Kill waterway but must do so at slow speed to avoid interfering with the ongoing oil spill clean up operations at Motiva's Sewaren, NJ terminal. As of 1:00 pm today (November 6) restrictions on the Arthur Kill remain in place.

Petroleum Terminals

- A total of 57 terminals in the path of Hurricane Sandy have reported on their status in the aftermath of the storm. As of 1:00 pm today (November 6), reports indicate that 48 terminals are open and 9 terminals are shut.
- The table below lists terminals that remain shut or that have recently re-opened. For a full list of terminals that were reported on, see Situation Report #17.

| Status of Petroleum Terminals as of 1:00 pm EST 11/6/12 | | | | | | | | |
|---|---------------|-------|--------|------------|--|--|--|--|
| Company | City | State | Status | Date Stamp | | | | |
| Hess | Bayonne | NJ | Shut | 11/3/12 | | | | |
| CITGO | Linden | NJ | Shut | 11/5/12 | | | | |
| Hess | Newark | NJ | Shut | 11/2/12 | | | | |
| Motiva | Newark | NJ | Shut | 10/31/12 | | | | |
| Hess | Perth Amboy | NJ | Shut | 11/2/12 | | | | |
| Motiva | Sewaren | NJ | Shut | 10/31/12 | | | | |
| Phillips 66 | Tremley Point | NJ | Shut | 11/3/12 | | | | |
| Motiva | Brooklyn | NY | Shut | 10/31/12 | | | | |
| Motiva | Long Island | NY | Shut | 10/31/12 | | | | |

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

^{*}The Hess Port Reading, NJ facility does not process crude, but processes gas oils to produce petroleum products.



Petroleum Pipelines

 On November 4, Colonial pipeline reported commercial power was restored to its Linden, NJ facility. The company also reported that all of the delivery lines out of the Linden facility are operable.

Electric Restoration Information

Connecticut

- The United Illuminating Company (UI) reported this morning (November 6) that there are more than 2,000 homes along the shoreline that cannot get power due to damage.
- Connecticut Light and Power (CL&P), a Northeast Utilities (NU) company, reported yesterday (November 5) that they have substantially completed the restoration of their customers and are working to restore the remaining three percent of customers in their service territory.

Maryland

• Potomac Edison, a FirstEnergy Corp. subsidiary, announced today (November 6) that the remaining customers without power would be restored by tonight.

New Jersey

- The State of New Jersey released power restoration plans from Public Service Electric and Gas, Jersey Central Power and Light, Atlantic City Electric, and Orange & Rockland. The updated restoration plans can be found in the "Information Sources" section at: http://www.state.nj.us/nj/home/features/spotlight/hurricane_sandy.shtml.
- Public Service Electric and Gas (PSE&G) reported this morning (November 6) that they hope to have 90 percent of customers restored by tomorrow morning (November 7). They expect to restore service to most customers by Friday (November 9), but stated that the majority of customers would be restored before then. PSE&G stated that they have one substation left out of service (in Bayonne) and hope to have it back in service today. This will complete the most extensive substation restoration project in the company's history. More than 100 out-of-state substation experts traveled there from around the nation to help with these efforts. PSE&G has secured an additional 600 line workers who are being redirected from Pennsylvania. There are now more than 4,600 workers on the ground helping restore power.
- Orange and Rockland (O&R), serving New Jersey, New York, and Pennsylvania estimates to have
 all of the customers affected by Sandy back in service by Saturday (November 10), a day earlier
 than previously estimated. The O&R team totals 3,500 workers—including 1,000 employees and
 2,500 contract personnel from across the country— is the largest workforce in O&R history. In New
 Jersey, outages are concentrated in Bergen and Passaic counties.
- Jersey Central Power & Light (JCP&L) reported today (November 6) that the majority of customers are expected to be restored by tomorrow (November 7). Customers in the hardest-hit areas can expect to be restored throughout the following week. Most of the customers who remain without power live in Morris, Monmouth and Ocean counties. A significant number of customers will not be able to receive service until damaged roads, infrastructure and homes are rebuilt. JCP&L's team is made up of 8,200 professionals, including 3,800 linemen and 1,500 forestry workers. An additional 260 linemen arrived yesterday (November 5) to assist JCP&L's restoration effort. JCP&L has received crews from as far away as Canada, California, Washington state and Florida. Crews have



- repaired transmission lines that feed local substations. JCP&L crews were working with transmission linemen supplied by FEMA to restore the 34.5 kV circuits in Monmouth and Ocean counties which bring high voltage to the local neighborhood system.
- Atlantic City Electric (ACE) stated yesterday (November 5) that they are working to restore the remaining less than 1 percent of their customers and expected all who are able to accept power to be restored by early this morning (November 6). Atlantic City Electric has released over 700 mutual assistance personnel it received to help utilities to its north deal with the devastation.

New York

- Con Edison reported yesterday (November 5) that the remaining customers in Bronx, Brooklyn, Queens, Staten Island, and Westchester County are estimated to be restored by midnight next Sunday (November 11). More than 2,500 utility workers from as far away as California are working in New York City and Westchester County to assist in restoration efforts. An additional 500 outside utility workers are scheduled to arrive today. Many personnel came from Dominion Virginia Power, PG&E, Duke Energy, Alabama Power, Pepco, and Southern California Edison to support Con Edison's restoration effort.
- Long Island Power Authority (LIPA) expects 90 percent of their customers to be restored by Wednesday (November 7). The company stated that restoration for customers in Brookville, St. James, and Port Jefferson may be a week or more beyond the 7th. In addition to setting up portable generation to start to bring power to the main roads, traffic lights, and some housing complexes, LIPA has deployed restoration crews to begin construction to build a bypass system to get transmission to the Rockaway Beach substation. Once power is distributed to the substation in the Rockaway area, crews will begin to energize the distribution system. Additionally, work continues to repair all other substations on the peninsula which suffered extreme flood damage from the storm. In the interim, mobile substations are temporarily being brought in and sited. LIPA On November 4th, LIPA estimated that there are up to 100,000 customers from the most severely flooded areas on Long Island whose homes and businesses currently may be unable to receive power. There are 11,000 restoration workers, including 7,000 outside linemen from throughout the country, continue to work to restore homes and businesses.
- Long Island Power Authority (LIPA) has teamed with National Grid in a task force that is working to restore power in New York City. The team has been engaged in plans with the New York City Housing Authority, New York Police Department, Fire Department of New York, and Office of Emergency Management (OEM) to develop a plan of action to determine the most effective approach to energize homes and businesses that are able to receive power. The team today (November 6) is prioritizing the restoration of the Rockaway Peninsula in Queens.
- New York State Electric and Gas (NYSEG) reported today (November 6) that their team has grown to 3,500 front line and support personnel as the first of 40 crews from British Columbia join the growing NYSEG power restoration team today. Line and tree crews are being added to the NYSEG power restoration team as they are released from utilities and contractors across the country and from Canada. More than 600 line and tree crews from as far away as Nova Scotia, Missouri, North Carolina, Texas and Minnesota are on the job. The company expects that virtually all customers will be restored by midnight tomorrow (November 7). NYSEG has replaced 740 of the 921 poles broken in its downstate service area.
- Orange and Rockland (O&R), serving New Jersey, New York, and Pennsylvania estimates to have 90% of the customers affected by Sandy back in service by Saturday (November 10), a day earlier than previously estimated. The O&R team totals 3,500 workers—including 1,000 employees and



2,500 contract personnel from across the country— is the largest workforce in O&R history. In New York, outages are concentrated in Rockland and Orange counties.

Pennsylvania

- PECO reported today (November 6) that they expect service to be returned to all customers by midnight tonight. The majority of customers without power are concentrated in Bucks and Montgomery counties, but there are also scattered outages in Chester, Delaware and Philadelphia counties.
- In the Met-Ed service announced today (November 6) that the remaining customers without power are expected to be restored by tomorrow (November 7).
- PPL Electric Utilities (PPL) reported yesterday (November 5) the extent of the destruction will require some repairs to extend through the night and most customers should be back on line today (November 6).

West Virginia

- Appalachian Power (AEP), reported Monday (November 5) that, there are isolated areas where damage was most severe may not be restored until today (November 6). This includes parts of Fayette, Raleigh and Wyoming counties. More than 350 line workers and 300 tree trimmers are working in areas where outages exist.
- Mon Power, a First Energy Corp. subsidiary, reported yesterday (November 5) that more than 2,700 Mon Power employees, contractors and outside utility crew members—including 300 linemen from American Electric Power who arrived yesterday (November 5)—are working to restore service. Approximately 700 miles of the more than 900 miles of transmission lines damaged by the storm have been restored. Restoration estimates include:
 - o Today (November 6): Widen (Clay County), Lewis County, St. George (Tucker County), Upshur County, Harman (Randolph County)
 - o Tomorrow (November 7): Rowlesburg (Preston County)
 - Thursday (November 8): Barbour County, Braxton County, Grant County, Nicholas County
 - o Friday (November 9): Webster County, Mineral County, Greenbrier County, and the remainder of Clay, Randolph, Preston, and Tucker counties.

Customers located in remote parts of Barbour, Braxton, Clay, Nicholas, Preston, Randolph, Tucker and Webster counties may not be fully restored until the end of the weekend.