

Hurricane Sandy Situation Report # 12 November 3, 2012 (10:00 AM EDT)

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 9:00 am EDT November 3 there are 2,576,101 customers without power in the affected States. 5,935,150 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 | 144,678 | 7% | 626,559 | 481,881 | |
| Maryland | 11,713 | < 1% | 311,020 | 299,307 | |
| New Jersey | 1,284,381 | 32% | 2,615,29 | 1,330,910 | |
| New York | 875,514 | 9% | 2,097,933 | 1,222,419 | |
| Ohio | 30,917 | < 1% | 267,323 | 236,406 | |
| Pennsylvania | 163,744 | 3% | 1,267,512 | 1,103,768 | |
| West Virginia | 65,154 | 6% | 271,765 | 206,611 | |
| TOTAL: | 2,576,101 | | | | |

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 2010 EIA Customer Data.

- Yesterday (November 2), President Obama directed the US Department of Energy to loan Ultra Low Sulfur Diesel (ULSD) from the Northeast Home Heating Oil Reserve to the US Department of Defense's Defense Logistics Agency (DLA). DLA will draw down two million gallons from a heating oil reserve terminal in Groton, CT and will distribute it to State, local, and federal responders in the New York/New Jersey area.
- Yesterday (November 2), the US Environmental Protection Agency (EPA), in consultation with the US Department of Energy, issued a waiver of the Ultra Low Sulfur Diesel (ULSD) fuel specifications to allow the use of high-sulfur heating oil in diesel-powered highway and nonroad equipment and vehicles in addition to nonroad vehicles in Pennsylvania, the five boroughs of New York City, and the counties of Nassau, Suffolk, Rockland, and Westchester in New York State.
- Yesterday, the State of New Jersey declared a State of Emergency regarding to the supply of motor fuel in the counties of Bergen, Essex, Hudson, Hunterdon, Middlesex, Morris, Monmouth, Passaic, Somerset, Sussex, Union, and Warren. In those twelve counties there will be rationing of motor fuel



- purchases based on the last number of the license plate. The rationing will begin at noon today (November 3) and will end when the Governor declares the State of Emergency over.
- Yesterday (November 2) the Department of Homeland Security, in consultation with the US
 Department of Energy, issued a waiver of the Jones Act to allow foreign flagged oil tankers coming
 from ports in the Gulf Coast Petroleum Administration for Defense District (PADD 3) to deliver
 petroleum products to ports in the New England and Central Atlantic PADDs (PADDs 1a and 1b).
 Ships under this waiver must load by November 13th and offload at their destinations by November
 20th.
- Yesterday (November 2), the State of New Jersey issued a waiver on the licensing requirements of fuel merchants. This waiver allows fuel merchants in the State of New Jersey to buy fuel from out-of-State suppliers. The waiver will be in place until November 7th.
- Yesterday (November 2), the U.S. Nuclear Regulatory Commission (NRC) reports all nuclear power units in the Northeastern United States that were shut down as a result of impacts from Hurricane Sandy have been restarted and are ramping up power output. Details on the plants and/or units can be found in Situation Report #10.

ESF 12 Actions:

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

Petroleum & Natural Gas Information: Refineries

- Trade press reported yesterday (November 2) that Phillips 66's Bayway refinery in Linden, NJ could be weeks away from restarting due to damage caused by salt water flooding
- At Hess's Port Reading, NJ refinery, trade press reported yesterday (November 2) that generators are being used to resume truck rack and marine operations.

| Refineries in the Path of Sandy as of 8:00 am EDT 11/3/12 | | | | | | | |
|---|-------------------|------------------------|-----------|------------|-----------------|---------|--|
| | 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

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



Ports

• As of November 2, The Port of New York is open to all fuel barge and tug traffic. Other deep-draft vessels are allowed to enter the waterways on a case-by-case basis in coordination with the Captain of the Port. Port Jersey Channel and Gravesend Bay anchorage are open. The Hudson River is open to all vessel traffic. Tugs and barges are permitted to transit the Arthur Kill waterway from the south but the waterway is under a no wake zone restriction. The U.S. Coast Guard has reopened all other port sectors affected by Sandy.

Petroleum Terminals

• The table below lists the status of 50 petroleum terminals impacted by Hurricane Sandy.

| Status of Petroleum Terminals as of 8:00 am EDT 11/3/12 | | | | | |
|---|---------------|-------|---|------------|--|
| Company | City | State | Status | Date Stamp | |
| Motiva | Bridgeport | CT | Open with reduced operations | 10/31/12 | |
| Hess | Groton | CT | Shut | 10/30/12 | |
| Gulf Oil | New Haven | CT | Open | 11/1/12 | |
| Magellan Midstream | New Haven | CT | Open with reduced operations | 11/1/12 | |
| Motiva | New Haven | CT | Open | 10/31/12 | |
| Magellan Midstream | Wilmington | DE | Open | 10/30/12 | |
| NuStar Energy | Andrews AFB | MD | Open | 10/31/12 | |
| Motiva | Baltimore | MD | Open | 10/31/12 | |
| NuStar Energy | Baltimore | MD | Open | 10/31/12 | |
| NuStar Energy | Piney Point | MD | Open | 10/31/12 | |
| Hess | Bayonne | NJ | Shut | 11/2/12 | |
| IMTT | Bayonne | NJ | Shut | 10/31/12 | |
| Kinder Morgan | Carteret | NJ | Shut, Restart in 24-48 hours | 11/1/12 | |
| Hess | Edgewater | NJ | Shut | 11/2/12 | |
| Buckeye Pipeline | Linden | NJ | Open | 11/2/12 | |
| Colonial Pipeline | Linden | NJ | Open | 11/1/12 | |
| NuStar Energy | Linden | NJ | 2 of 8 truck bays open | 11/2/12 | |
| Phillips 66 | Linden | NJ | Open with limited service to aid emergency personnel | 11/2/12 | |
| Hess | Newark | NJ | Shut | 11/2/12 | |
| Motiva | Newark | NJ | Shut | 10/31/12 | |
| NuStar Energy | Paulsboro | NJ | Open | 10/31/12 | |
| Hess | Pennsauken | NJ | Open | 11/2/12 | |
| Hess | Perth Amboy | NJ | Shut | 11/2/12 | |
| Kinder Morgan | Perth Amboy | NJ | Shut, Restart in 24-48 hours | 11/1/12 | |
| Hess | Port Reading | NJ | Truck rack ops resumed; marine ops resumed on limited basis | 11/2/12 | |
| Motiva | Sewaren | NJ | Shut | 10/31/12 | |
| Phillips 66 | Tremley Point | NJ | Shut | 11/2/12 | |
| Castle Port Morris | Bronx | NY | Open | 11/1/12 | |
| Hess | Bronx | NY | Rack ops resumed | 11/2/12 | |



| Status of Petroleum Terminals as of 8:00 am EDT 11/3/12 | | | | | |
|---|------------------|-------|---------------------------------|------------|--|
| Company | City | State | Status | Date Stamp | |
| Schildwachter Oil | Bronx | NY | Open | 11/1/12 | |
| Bayside Fuel Oil Depot | Brooklyn | NY | Open | 11/1/12 | |
| Hess | Brooklyn | NY | Expected to Open Soon | 11/2/12 | |
| Motiva | Brooklyn | NY | Shut | 10/31/12 | |
| Skaggs Walsh | College Point | NY | Open | 11/1/12 | |
| Northville Industries | Holtsville | NY | Open, Expecting Deliveries 11/3 | 11/2/12 | |
| Buckeye Pipeline | Inwood | NY | Expected Open by 11/3 | 11/2/12 | |
| Global Partners | Inwood | NY | Expected to Restart 11/2 | 11/2/12 | |
| Motiva | Long Island | NY | Shut | 10/31/12 | |
| Buckeye Pipeline | Long Island City | NY | Expected Open by 11/3 | 11/2/12 | |
| Global Partners | Newburgh | NY | Open, Expecting Deliveries 11/3 | 11/2/12 | |
| Global Partners | Oyster Bay | NY | Open | 11/2/12 | |
| Phillips 66 | Riverhead | NY | Open | 11/2/12 | |
| Hess | Roseton | NY | Rack ops resumed | 11/2/12 | |
| Kinder Morgan | Staten Island | NY | Shut, Restart in 24-48 hours | 11/1/12 | |
| Kinder Morgan | Philadelphia | PA | Open | 10/31/12 | |
| Motiva | Providence | RI | Open | 10/31/12 | |
| NuStar Energy | Dumfries | VA | Shut, Expected Back 11/1 | 10/31/12 | |
| Motiva | Fairfax | VA | Open | 10/31/12 | |
| Motiva | Richmond | VA | Open | 10/31/12 | |
| NuStar Energy | Virginia Beach | VA | Open | 10/31/12 | |

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

Petroleum Pipelines

- Colonial Pipeline reported November 1 that it restarted a large section of the Northeast mainline
 which was shut down on October 29. The company stated that it expected that this line would make
 deliveries up to Linden, NJ on November 2. On November 1, the company reported its Linden, NJ,
 facility resumed deliveries to Buckeye Pipeline. Colonial said that the Linden facility was running
 on portable generators.
- As of November 3, Buckeye has restarted all of its operations; power has been restored to Buckeye Pipeline, including its Linden, NJ facility. The pipeline is supplying jet fuel to the 3 airports in the New York City area.

Electric Restoration Information Connecticut

- The United Illuminating Company has projected it will complete service restoration to 95 percent of its customers before midnight on Monday (November 5). The restoration team includes 1,391 FTE's working in the field (519 line workers, 373 line clearance workers, 246 damage assessors, 98 service personnel, and 155 wires down workers).
- Connecticut Light and Power (CL&P) reported yesterday (November 2), that they expect that the vast majority of its customers will have power restored by Tuesday (November 6). The total number



of storm responders is now more than 6,000, with 500 line workers joining the effort yesterday from NSTAR, Public Service of New Hampshire, and Western Massachusetts Electric, along with their Canadian partner Hydro Québec. In all, workers have come from 16 states and four Canadian provinces. While large trees still block roads in some of the hardest hit areas, workers have made significant progress in clearing thousands of roads across the state and restoring power to the majority of critical facilities.

Maryland

- FirstEnergy Corp. estimated yesterday (November 2) that the majority of Maryland customers are expected to be restored by 6 pm today (November 3). 95 percent of Garrett City customers expected to be restored by midnight Monday (November 5). More than 16,000 FirstEnergy employees, contractors and workers from other utilities, are working to restore power. Across First Energy's service territory, materials they have issued for the restoration effort through Thursday (November 1) include more than 95 miles of wire, 700 utility poles and 5,400 cross arms and transformers.
- Baltimore Gas and Electric Company (BGE) stated yesterday (November 2) it expected the vast majority of its customers affected by Hurricane Sandy to have power restored last night. The company stated that some work will continue this weekend to address scattered outages involving significant damage. BGE has more than 5,600 employees, contractors and out-of-state linemen, tree personnel and support staff on the restoration team. This number includes more than 1,800 out-of-state and contract linemen, tree personnel and support staff from Alabama, Florida, Georgia, Illinois (ComEd), Indiana, Louisiana, Mississippi, Missouri, Minnesota, New Mexico, North Carolina, Oklahoma, Tennessee and Texas (Oncor).
- Delmarva Power expected to restore service to most customers by 6pm tonight (November 2). Delmarva Power has mobilized more than 1,500 service personnel including company teams and crews from as far away as New Mexico

New Jersey

- Public Service Electric and Gas (PSE&G) reported today (November 3) that they estimate virtually all impacted customers will be restored to service within the coming week, but the majority of customers will be restored before then. After November 9th, there may still be isolated pockets of customers who have individual flooding or downed line issues that may take slightly longer. PSE&G stated they are working with the NJ Gasoline Service Association to identify gas stations that have the commodity, but need power restored. The total number of people who have come from other states to assist is now more than 2,000. This includes additional line personnel, tree crews and substation operators. Crews helping in the restoration efforts have arrived from Florida, Georgia, Indiana, Illinois, Missouri, Pennsylvania, Tennessee, Texas, and Wisconsin, as well as Canada.
- Orange and Rockland (O&R), serving New Jersey, New York, and Pennsylvania estimated today (November 3) that 90 percent of its customers' service should be restored by November 11. The vast majority of its customers without power should have electricity restored by the end of next week with the final restoration occurring through the following week. The company has restored 26 of the 27 transmission lines, all of the 17 de-energized substations, and 61 of the 101 downed distribution circuits. Currently, more than 1,000 O&R employees and over 1,800 contractors from almost 20 States are working to restore power. Crews and equipment from California were air-lifted by military transport to Stewart Airport in Newburgh yesterday and will be joining O&R today. O&R anticipates the arrival of National Guard troops later this morning. The National Guard's main



focus will be helping to clear roads and ensure that areas with downed wires remain safe. This will also help the Company reassign more O&R employees to contribute directly to restoration work

- Jersey Central Power & Light (JCP&) reported yesterday (November 2) that the majority of its customers (including those in Monmouth, Morris, and Flemington counties and Toms River township) will be restored by Wednesday (November 7) and customers in the hardest-hit areas could expect to be restored throughout the following week. A significant number of customers will not be able to receive service until damaged roads, infrastructure and homes are rebuilt. In the JCP&L service area the storm caused damage to more than 450 utility poles and 12,000 trees have been cut and removed from JCP&L equipment since Monday (October 29). The restoration of the utility's customers is being worked by 6,400 professionals, including 2,500 linemen and 1,500 forestry workers.
- Atlantic City Electric (ACE) estimated yesterday (November 2) that it would restore power to all of
 its mainline customers who can receive power (with the exception of the Atlantic and Ocean
 counties) by last night. ACE estimates it will restore power to all customers capable of receiving
 power in the Atlantic and Ocean counties by the end of the day tomorrow. The team of 1,900
 restoration personnel working in the ACE service territory includes over 300 mutual assistance
 crews.
- Sussex Rural Electric Cooperative estimated yesterday (November 2) that it expects that they will have all customers who can be reconnected restored by the end of the day yesterday.

New York

- Con Edison reported today (November 3) that most of Manhattan has been restored and expects all of Manhattan to be restored by the end of the day today. Some buildings in Manhattan who suffered basement flooding or damage to local equipment may still be without electricity. The company stated its goal is to restore electricity to all schools by Monday (November 5) and polling places by Tuesday. The company expects to restore the vast majority of customers who lost power by next weekend, November 10 11. The company stated they have hundreds of crews from outside utilities who are assisting Con Edison personnel in the restoration.
- Central Hudson estimated yesterday (November 2) that it the majority of the customers who remain without power to be restored by tomorrow night with some restoration work continuing on Sunday. The majority of outages remaining are concentrated in Ulster County, with smaller numbers (in descending order) in Orange, Sullivan, Dutchess, and Putnam counties. The company estimates that there are more than 500 distinct damage locations that must be repaired by their field forces, including 170 broken poles and 1,100 instances of downed wires. Central Hudson is deploying 700 employee line personnel, contractors, and mutual aid crews from Florida, Iowa, Indiana, and Wisconsin.
- New York State Electric and Gas (NYSEG) reported yesterday (November 2) the company expects that the vast majority of customers will be restored by midnight tomorrow, with remaining customers restored by midnight Wednesday (November 7). NYSEG reported More than 2,600 personnel are on the job.
- Long Island Power Authority (LIPA) stated last night (November 2) that they have restored 37 of the substations who were out of power due to Sandy. The company has also energized supply to the Ronkonkoma and Babylon lines of the Long Island Rail Road and efforts are now focused on the Port Washington line. LIPA expects to restore power to the majority of its customers by the



- weekend of November 10-11. There are over 7,000 personnel currently supporting the LIPA restoration including over 3,000 High Voltage and Tree Trim Crews working on the system.
- Orange and Rockland (O&R), serving New Jersey, New York, and Pennsylvania estimated today (November 3) that 90 percent of its customers' service should be restored by November 11. The vast majority of its customers without power should have electricity restored by the end of next week with the final restoration occurring through the following week. The company has restored 26 of the 27 transmission lines, all of the 17 de-energized substations, and 61 of the 101 downed distribution circuits. Currently, more than 1,000 O&R employees and over 1,800 contractors from almost 20 States are working to restore power. Crews and equipment from California were air-lifted by military transport to Stewart Airport in Newburgh yesterday and will be joining O&R today. O&R anticipates the arrival of National Guard troops later this morning. The National Guard's main focus will be helping to clear roads and ensure that areas with downed wires remain safe. This will also help the Company reassign more O&R employees to contribute directly to restoration work

Ohio

• In Ohio, FirstEnergy Company estimated yesterday (November 2), that Ashtabula County, Lake County and far eastern suburbs including Euclid and Mayfield would be restored by midnight tomorrow. The Cleveland and near east, west and southwest suburbs would be restored by midnight Monday (November 5).

Pennsylvania

- PECO today (November 3) stated that most remaining customers should have service restored during the weekend. Some customers in the most damaged and isolated areas may be without electricity until early next week. In all, more than 4,700 employees and contractors (of those, 3,700 are working in the field) are working to repair this damage and restore service to customers. PECO field forces have completed more than 13,000 repair jobs. Crews also have replaced 73 miles of wire, 8,681 fuses, 1,020 cross arms, 287 poles, and 64 transformers.
- First Energy, which includes PennPower, WestPenn Power, Met-Ed and Penelec, reported PennPower and WestPenn Power are both fully restored. In the Met-Ed service territory, 95 percent of customers will be in service by the end of the day today (November 3) and the remainder will be restored early next week. For Penelec, the majority of customers in Erie, Oil City, Johnstown, Clearfield, Lewistown, Altoona, Mansfield and Towanda are restored. Across the First Energy utilities, more than 16,000 company personnel, electrical contractors and outside utility resources are assisting with service restoration efforts.
- PPL Utilities yesterday (November 2) that the goal remains to restore power to 80 to 85 percent of all affected customers across its system by 11pm today and to have the lights back on for all, including the Lehigh Valley, parts of Bucks and Montgomery counties, the Poconos and northeast Pennsylvania, by 11 pm Sunday.
- Orange and Rockland (O&R), serving New Jersey, New York, and Pennsylvania estimated today (November 3) that 90 percent of its customers' service should be restored by November 11. The vast majority of its customers without power should have electricity restored by the end of next week with the final restoration occurring through the following week. The company has restored 26 of the 27 transmission lines, all of the 17 de-energized substations, and 61 of the 101 downed distribution circuits. Currently, more than 1,000 O&R employees and over 1,800 contractors from almost 20 States are working to restore power. Crews and equipment from California were air-lifted by military transport to Stewart Airport in Newburgh yesterday and will be joining O&R today.



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West Virginia

- Appalachian Power (AEP), which services Tennessee, Virginia, and West Virginia, reports that, in West Virginia, most of the remaining outages are in Boone, Fayette, Lincoln, Kanawha, Raleigh and Wyoming counties. Many areas (including Nicholas, Summers, and Greenbrier counties and the towns of Pt. Pleasant, Beckley, Bluefield, Hico, Logan, Williamson, and Welch and their surrounding areas) will be 90 percent restored by tonight (November 2). Some (Kanawha, Boone, Cabell, Puntman, Clay, and Roane counties) will not until Sunday night (November 4). The restoration times for Pineville, Ripley, and their surrounding areas has been pushed to tomorrow (November 3) at midnight.
- Mon Power, a FirstEnergy subsidiary, reported yesterday (November 2) that the majority of affected Mon Power customers are expected to be restored by early next week. Restoration times estimated last night (November 2) include: the town of Webster Springs should be in service tomorrow; Upshur County should be restored Tuesday (November 6); Grant County should be in service Thursday (November 8); and Mineral County and the remainder of Webster County should be restored next Friday (November 9). Across the First Energy utilities, more than 16,000 company personnel, electrical contractors and outside utility resources are assisting with service restoration efforts.