



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

Hurricane Sandy Situation Report # 13

November 3, 2012 (3:00 PM 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 2:00 pm EDT November 3 there are 2,497,421 customers without power in the affected States. 6,013,830 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	132,805	6%	626,559	493,754
Maryland	12,064	< 1%	311,020	298,956
New Jersey	1,241,763	31%	2,615,291	1,373,528
New York	871,161	9%	2,097,933	1,226,772
Ohio	25,244	< 1%	267,323	242,079
Pennsylvania	153,695	2%	1,267,512	1,113,817
West Virginia	60,689	6%	271,765	211,076
TOTAL:	2,497,421			

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), the US Environmental Protection Agency (EPA) issued a Non Action Assurance (NAA) that will allow the loading and unloading of fuel at bulk gasoline and marine loading terminals and associated truck loading racks in New Jersey and New York without the use of a vapor recovery device or vapor combustion device as required by current national standards. The NAA will terminate on November 17.
- 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



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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 (November 2), 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 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 U.S. Nuclear Regulatory Commission (NRC) reported 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 <i>as of 1:00 pm EDT 11/3/12</i>						
Refinery	Location	Capacity (B/D)				
		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.

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

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



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Ports

- As of 1:00 pm today (November 3), 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. Vessel entry to the Port and anchorage use is limited to vessels with an approved facility berth or orders to bunker or lighter at anchor.

Petroleum Terminals

- The table below lists the status of 52 petroleum terminals impacted by Hurricane Sandy.

Status of Petroleum Terminals as of 2:00 pm EDT 11/3/12				
Company	City	State	Status	Date Stamp
Motiva	Bridgeport	CT	Open with reduced operations	10/31/12
Hess	Groton	CT	Open	11/3/12
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	Open	11/3/12
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	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	Open	11/3/12
Hess	Port Reading	NJ	Open	11/2/12
Motiva	Sewaren	NJ	Shut	10/31/12
Phillips 66	Tremley Point	NJ	Shut	11/2/12
Castle Oil	Bronx	NY	Open,	11/3/12
Hess	Bronx	NY	Open	11/3/12
Schildwachter Oil	Bronx	NY	Open	11/1/12
Bayside Fuel Oil Depot	Brooklyn	NY	Open	11/3/12
BP	Brooklyn	NY	Open	11/3/12
Hess	Brooklyn	NY	Open	11/3/12

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Status of Petroleum Terminals as of 2:00 pm EDT 11/3/12

Company	City	State	Status	Date Stamp
Motiva	Brooklyn	NY	Shut	10/31/12
Skaggs Walsh	College Point	NY	Open	11/1/12
Northville Industries	Holtsville	NY	Open	11/3/12
Buckeye Pipeline	Inwood	NY	Open	11/3/12
CARBO	Inwood	NY	Open	11/3/12
Global Partners	Inwood	NY	Open	11/3/12
Motiva	Long Island	NY	Shut	10/31/12
Buckeye Pipeline	Long Island City	NY	Open	11/3/12
Global Partners	Newburgh	NY	Open	11/3/12
Global Partners	Oyster Bay	NY	Open	11/2/12
Phillips 66	Riverhead	NY	Open	11/2/12
Hess	Roseton	NY	Open	11/2/12
Kinder Morgan	Staten Island	NY	Open	11/3/12
Kinder Morgan	Philadelphia	PA	Open	10/31/12
Motiva	Providence	RI	Open	10/31/12
NuStar Energy	Dumfries	VA	Shut	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 7,000, including 2,600 outside line workers from 16 and four Canadian provinces. Over 569 licensed electricians are available to assist with individual customer**



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service wire reattachments. Over 500 line workers joined the effort yesterday (November 2) from NSTAR, Public Service of New Hampshire, and Western Massachusetts Electric, along with their Canadian partner Hydro Québec. **Crews are working in the southwest Connecticut areas closest to where the eye of the storm hit and the strongest winds affected the infrastructure. Crews are continuing an extensive restoration effort repairing the remaining 319 blocked roads, 477 broken poles, and 1,871 spans of wire down.**

Maryland

- **FirstEnergy Corp. estimated yesterday (November 2) that the majority of their Potomac Edison Maryland customers are expected to be restored by 6 pm today (November 3). It is expected that 95 percent of Garrett City customers expected to be restored by midnight Monday (November 5). Most areas will in FirstEnergy's Mon Power service territory who still do not have power should be restored between tomorrow (November 4) and next Thursday (November 8). Some parts of Tucker, Randolph, Greenbrier, Mineral and Webster counties will not be fully restored until next Friday (November 9). More than 16,000 FirstEnergy employees, contractors and workers from other utilities, are working to restore power.**
- **Baltimore Gas and Electric Company (BGE) stated today (November 3) that the vast majority of their customers have seen their power restored.** The company stated that some work will continue through the 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 **1,900** 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 has fully restored power to all of its customers affected by Hurricane Sandy.** Delmarva Power mobilized more than 1,500 service personnel for the restoration, 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. The company estimates the vast majority of its customers in Union City and West New York will have power by tonight. Since yesterday (November 2), PSE&G has energized all of their switching stations and restored 16 substations. The 16 substations that were restored in the last 24 hours include substations that serve parts of Union Township, Kenilworth, Cranford, and Roselle Park, Bound Brook, Port Newark, Ironbound section of Newark, Hillside, Irvington, Elizabeth, North Plainfield, Bayonne, Jersey City, Linden and Carteret. After next Friday (November 9), 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. A total of 2,794 mutual aid line workers and tree contractors from out-of-state are assisting the in restoration. An additional 319 new workers are due today (November 3) and 300 more are being sent from Washington, DC today from PEPCO. In addition, 102 out-of-state personnel who specialize in substations have arrived to assist in the efforts. Crews helping in the restoration efforts have arrived from Florida, Georgia, Indiana, Illinois, Missouri, Pennsylvania, Tennessee, Texas, and Wisconsin, as well as Canada.**

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- 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 over the course of the next week, with the final restoration occurring through the following week. **National Guard troops are in place to help clear roads and ensure downed wire safety, which allows reassignment of more crews to direct restoration.** O&R 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.
- **Jersey Central Power & Light (JCP&) reported today (November 3) that the majority of its customers 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) stated today (November 3) that most outages on the mainland have been restored and the most severely impacted customers on the mainland and barrier island communities capable of accepting power should be fully restored by the end of the weekend. The ACE team included close to 2,000 restoration personnel in their service territory, including crews from their sister utilities in Maryland and Delaware as well as over 1,000 mutual assistance personnel from as far away as Texas and Alabama. Due to restoration progress, ACE has released over 700 mutual assistance personnel it received to help utilities to its north deal with the devastation**

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 that suffered basement flooding or damage to local equipment may still be without electricity. **The remaining customers in Bronx, Brooklyn, Queens, Staten Island, and Westchester county are estimated to be restored by midnight November 11. Restoration times by location can be found at: http://apps.coned.com/stormcenter_external/default.html**
- **Central Hudson stated today (November 3) that it expects restoration to be largely completed today with remaining cases in remote and hard-hit areas lasting until Monday (November 5).** The majority of outages remaining are concentrated in Ulster County, with smaller numbers (in descending order) in Orange, Sullivan, Dutchess, and Putnam counties. **In all, nearly 1,500 individual damage locations have been repaired and electric service will be completed to all customers in less than one week.** This included **nearly 200 broken poles** and 1,100 instances of downed wires. Central Hudson deployed 700 employee line personnel, contractors, and mutual aid crews from Florida, Iowa, Indiana, and Wisconsin.
- **New York State Electric and Gas (NYSEG) reported today (November 3) the company expects that the vast majority of customers will be restored by midnight tomorrow, with remaining customers restored by midnight Wednesday (November 7).** The company noted 600 broken poles and approximately 5,000 downed wires in its territory. NYSEG has been focused on energizing all

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priority transmission facilities and substations of the more than 38 transmission segments and 22 substations that were impacted and restoring service vital facilities such as the Metropolitan Transit Authority. NYSEG reported more than 2,600 personnel are on the job. Crews have come from as far away as Nova Scotia, Missouri, North Carolina, Texas and Minnesota.

- Long Island Power Authority (LIPA) stated today (November 3) that they expect two-thirds of their customers to be restored by tomorrow (November 4) with 90 percent of customers restored by Wednesday (November 7). Those customers in and around the most severely damaged areas of Brookville, St. James, and Port Jefferson are estimated to be restored in up to another week or more. LIPA crews have restored 39 of the 50 of the substations who were out of power due to Sandy. The company has also energized supply to the Ronkonkoma, Great Neck, Babylon, Huntington, and Port Washington lines of the Long Island Rail Road. There are over 8,000 personnel currently supporting the LIPA restoration including over 3,800 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 over the course of the next week, with the final restoration occurring through the following week. National Guard troops are in place to help clear roads and ensure downed wire safety, which allows reassignment of more crews to direct restoration. O&R 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 (November 3).

Ohio

- In Ohio, FirstEnergy Company estimated today (November 2), the following restoration estimates:
 - Midnight Tonight – Ashtabula, Burton, Chardon, Conneaut, and Orwell
 - Tomorrow Morning – Cleveland
 - Midnight Tomorrow – Beachwood, Bedford, Berea, Brecksville, Broadview Heights, Cleveland Heights, East Cleveland, Eastlake, Euclid, Independence, Mayfield Heights, Mentor, Middleburg Heights, North Royalton, Olmsted, Parma, Perry, Strongsville, and Wickliffe
 - Midnight Monday - Avon, Avon Lake, Bay Village, Brooklyn, Brookpark, Fairview Park, Lakewood, North Olmsted, Rocky River, Shaker Heights, Warrensville Heights, and Westlake

Pennsylvania

- PECO today (November 3) stated that most of the 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. An additional 400 support personnel from Maryland and their sister company ComEd are joining the PECO workforce today to help restore service to their customers, with 150 additional field personnel expected to join the PECO field forces today (November 3).



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- 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). **The majority of Met-Ed customers in Boyertown, Reading, Hamburg, Easton, and Stroudsburg counties are expected to be restored by Monday (November 5) with the remaining customers restored by Wednesday.** the remainder will be restored early next week. 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 11:00 PM tomorrow. **Approximately 600 additional line workers, now finished working in other areas of their service territory, arrived yesterday and today to supplement the existing group of repair crews. The additional manpower brings the total workforce in the eastern part of the state to 2,500.**
- 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 over the course of the next week, with the final restoration occurring through the following week. **National Guard troops are in place to help clear roads and ensure downed wire safety, which allows reassignment of more crews to direct restoration.** O&R 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 (November 3).

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 its affected customers in West Virginia by lat tonight. Times for complete restored estimated today (November 3) include: Today - Monongalia and Pocahontas counties; Tomorrow – Taylor county; November 6 – Lewis and Upshur counties; November 7- Clay county; November 8 – Barbour, Braxton, Grant, Nicholas, and Preston counties; and November 9 - Greenbrier, Randolph, Tucker, and Webster counties. Across the First Energy utilities, more than 16,000 company personnel, electrical contractors and outside utility resources are assisting with service restoration efforts.
- Potomac Edison, a FirstEnergy Subsidiary, reported yesterday (November 2) that the majority of its affected customers in West Virginia are expected to be restored by the end of the day today.