



# ENERGY ASSURANCE DAILY

Tuesday Evening, February 16, 2016

## *Major Developments*

### **Widespread Storm System Knocks Out Power to Over 334,000 Customers across Eastern U.S. February 15–16**

A stretch of low pressure caused severe thunderstorms bringing high winds, hail, and tornadoes to parts of the Southeast and brought snow and ice to parts of the Mid-Atlantic, collectively knocking out power to 334,784 customers Monday night into Tuesday morning. As of 4:00 p.m. EST Tuesday, 165,394 customers remained without power. Florida Power and Light, the hardest hit utility with 57,365 customer outages, said severe weather in South Florida caused tree debris to interfere with power lines and that its crews were working to restore service. Duke Energy, which reported 34,800 customer outages, said crews restored the majority of its customers by 9:00 a.m. EST after receiving numerous reports of downed power lines from strong winds that brought down trees and utility poles. Many estimates by New Jersey utility officials said that power was expected to be restored by Tuesday evening although some customers may see later restoration times due to infrastructure damage. On Tuesday, the storm system is expected to bring a band of rain with a threat of straight-line winds to the Northeast as far north as coastal Maine. The table below shows total affected customers and the latest reported outages by each utility. The “Affected” column shows either the total number of customers that lost power at one point or another during the outage event as reported by the utility or, when unavailable, the highest number of customers reported without power from various local news articles and utility outage websites, which were checked at various times throughout the day.

<b>Eastern U.S. Customer Power Outages</b>			
February 15–16, 2016			
<b>Electric Utility</b>	<b>State</b>	<b>Affected</b>	<b>Latest Reported</b>
Florida Power and Light	FL	57,365	8,966
Gulf Power	FL	25,000	1,711
Mississippi Power	MS	7,950	6
Entergy	MS	3,500	292
Duke Energy Carolinas	NC/SC	34,800	2,159
Jersey Central Power and Light	NJ	8,200	5,456
Public Service Electric and Gas (PSE&G)	NJ	17,000	16,355
Atlantic City Electric	NJ	14,000	6,059
National Grid	NY	6,459	6,459
New York State Electric and Gas	NY	13,436	11,917
Orange and Rockland	NY	4,499	4,499
PSEG Long Island	NY	16,249	16,249
Rochester Gas and Electric	NY	3,877	3,877
Central Hudson	NY	1,648	1,648
AEP – Ohio	OH	6,815	4,467
First Energy	OH	4,718	2,549
PECO	PA	10,696	3,508
First Energy	PA	6,276	2,475
PPL Electric Utility	PA	3,395	1,052
Laurens Electric Cooperative	SC	1,396	6
AEP - Appalachian	VA/WV	50,000	29,911
Dominion	VA	30,911	30,911
Central Virginia Electric Cooperative	VA	2,200	468
Potomac Edison and Mon Power	WV	4,394	4,394
<b>TOTAL*</b>		<b>334,784</b>	<b>165,394</b>

\*Total outages represent only electric utilities listed in this table.

Sources:

<http://www.fplmaps.com/>  
<http://outagemap.duke-energy.com/fl/default.html>  
<http://outagemap.gulfpower.com/external/default.html>  
<https://www.facebook.com/GulfPowerCompany?ref=sgm>  
<http://mississippipowernews.com/2016/02/16/storm-crews-respond-to-outages-assist-gulf-power-in-restoration-efforts/?hootPostID=0ae483e05ef3f38cc453b88cb98c21c3>  
<https://www.facebook.com/EntergyMS>  
[http://www.etrviewoutage.com/external/ms.aspx?\\_ga=1.12483892.1236390763.1392237350](http://www.etrviewoutage.com/external/ms.aspx?_ga=1.12483892.1236390763.1392237350)  
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<http://www.rge.com/Outages/outageinformation.html>  
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<http://www.nyseg.com/Outages/outageinformation.html>  
<https://www1.nationalgridus.com/PowerOutageMap>  
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<http://outages.firstenergycorp.com/oh.html>  
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[http://www.nj.com/news/index.ssf/2016/02/high\\_winds\\_leave\\_thousands\\_without\\_power\\_across\\_nj.html](http://www.nj.com/news/index.ssf/2016/02/high_winds_leave_thousands_without_power_across_nj.html)  
<http://www.washingtontimes.com/news/2016/feb/16/severe-storms-leave-thousands-without-power-in-new/>  
<http://www.wdbj7.com/news/local/more-than-30000-in-viewing-area-without-power/38016388>  
<http://www.dailyjournal.net/view/story/08c2e8aca7c6488ab480e14ffbed2cfa/VA--Winter-Storm-Power-Outages>  
<http://abc11.com/news/thousands-without-power-across-abc11-viewing-area/1202308/>  
<https://weather.com/storms/winter/news/winter-storm-olympia-impacts>

## ***Electricity***

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### **National Grid Reports 14,000 Customers without Power in Massachusetts Due to Transformer Issues, Downed Power Lines February 14**

National Grid reported 14,000 customers in Massachusetts were without power Sunday morning due to extremely cold temperatures. About 12,000 customers in Lynn were without power for several hours when two transformers went down due to low oil, according to a National Grid spokeswoman. An additional 2,000 customers lost power in Palmer when a power line went down. Power was restored to all affected customers by noon EST Sunday.

<https://www1.nationalgridus.com/PowerOutageMap>  
<http://www.boston.com/news/local/massachusetts/2016/02/14/subzero-weather-left-without-power-across-mass/iTtLBbGbgriPlxiV1S14O/story.html>

### **Entergy's 653 MW Pilgrim Nuclear Unit 1 in Massachusetts Reduced to 48 Percent by February 15**

On the morning of February 14 the unit was operating at full power.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

## **PSE&G's 1,092 MW Salem Nuclear Unit 2 in New Jersey Shut on February 14**

The unit shut from full power due to a main generator protection trip.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160216en.html>

## **Update: TVA's 1,125 MW Sequoyah Nuclear Unit 1 in Tennessee Restarts, Ramps Up to 15 Percent by February 15**

The unit was shut December 26 for a generator inspection and repair.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

## **Update: FirstEnergy's 1,235 MW Perry Nuclear Unit 1 in Ohio Restarts by February 13, Ramps Up to 60 Percent by February 16**

The unit shut from full power on February 8 following the involuntary opening of two safety relief valves (SRVs), which led to an increase in temperature within the suppression pool, triggering operators to shut the reactor. An investigation into why the two SRVs opened is underway.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160209en.html>

## **Update: Harbor Cogen's 109 MW Combined Cycle Gas-fired Unit in California Returns to Service by February 13**

The unit returned from an unplanned outage that began on January 31.

<http://content.caiso.com/unitstatus/data/unitstatus201602131515.html>

## **DOE Seeks Borehole Test for Potential Hot Nuclear Waste Burial in North Dakota**

The Department of Energy (DOE) plans to spend \$80 million assessing whether its hottest nuclear waste can be stored in 3-mile-deep holes, a project that could provide an alternative strategy to a Nevada repository plan that was halted in 2010. The five-year borehole project was tentatively slated to start later this year on state-owned land near Rugby, North Dakota, but it has already been met with opposition from state and local leaders who want more time to review whether the plan poses any public danger. Some sites in West Texas and New Mexico have expressed interest in becoming interim sites for above-ground nuclear waste storage. The research team will look at deep rock to check its water permeability, stability, geothermal characteristics, and seismic activity—a central concern with burying the hot radioactive waste deep underground.

Reuters, 13:31 February 14, 2016

## ***Petroleum***

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### **ExxonMobil Reports Unit Rate Cut after Leak at Its 560,500 b/d Baytown, Texas Refinery February 15**

ExxonMobil Corp reported a leak due to a hole in pipe J-4A at its Baytown, Texas refinery. The leak was isolated and rates of affected units were reduced to minimize emissions.

Reuters, 18:48 February 15, 2016

### **Total Reports Operations Normal after Equipment Malfunction at Its 225,500 b/d Port Arthur, Texas Refinery February 16**

Total SA reported operations were normal Tuesday after an equipment malfunction within unit 826 on Monday at its Port Arthur, Texas refinery, according to a Texas Commission on Environmental Quality filing.

Reuters, 11:20 February 16, 2016

### **Valero Restarting CDU after Weekend Shutdown at Its 335,000 b/d Port Arthur, Texas Refinery February 15 – Sources**

Valero Energy Corp was restarting the smaller of two crude distillation units (CDU) on Monday at its Port Arthur, Texas, refinery, said sources familiar with plant operations. Repairs were also being performed on the larger of two hydrocracking units (HCU) at the refinery, the sources said. The hydrocracker is expected to be shut for a week of work to correct a compressor malfunction. Energy industry intelligence service Genscape said the 75,000 b/d CDU shut down early on Sunday due to a pump failure. The pump's backup was being repaired, delaying the unit's restart until Tuesday. The 57,000 b/d vacuum gas oil HCU was shut due to a compressor malfunction, the sources said.

Reuters, 12:47 February 16, 2016

## **Shell Reports Alkylation Unit Shut at Its 145,000 b/d a Puget Sound, Washington Refinery February 11**

Royal Dutch Shell PLC reported excess emissions and alkylation unit 2 shut last Thursday at its Puget Sound, Washington refinery, according to the Northwest Clean Air Agency.  
Reuters, 19:32 February 12, 2016

## **Phillips 66 Reports Unplanned Unit Shutdown at Its 120,200 b/d Rodeo, California Refinery February 14**

Phillips 66 reported flaring due to an unplanned unit shutdown at its Rodeo, California refinery on Sunday, according to a filing with the Contra Costa Health Service Department. Refinery operations were continuing and no evacuations or injuries were reported, it added.  
Reuters, 4:49 February 15, 2016

## **Shell Restarting Unit at Its Scotford, Alberta Facility February 15**

Royal Dutch Shell PLC reported restarting a unit at its Scotford, Alberta facility on February 15, as well as intermittent flaring for 24 hours, according to a community information line. The Scotford facility houses a 100,000 b/d refinery and a 255,000 b/d oil sands upgrader.  
Reuters, 12:29 February 15, 2016

## **Citgo Working to Restart 235,000 b/d Aruba Refinery under Lease – Sources**

Citgo Petroleum was working to restart some processing units at the Aruba refinery under a 25-year lease contract with the government of the Caribbean island, sources at the facility and firms involved told Reuters on Saturday. The Aruba refinery's former operator, Valero Energy Corp, has not been involved in the negotiations, but the island has guaranteed the company that it can walk away from the refinery with zero environmental liability and without obligation to dismantle it. A source from the refinery said a technical team has been working since September on the facility's new configuration, including equipment replacement. Other sources added the process of hiring staff and contractors is about to begin. Operational units could take more than two years to get ready, another source said, because of the long time the facility has been idled.  
Reuters, 7:23 February 13, 2016

## **Oklahoma Hit by Its Third-Strongest Earthquake February 13 – USGS**

Oklahoma was struck by a magnitude 5.1 earthquake on Saturday morning, the third-strongest quake ever recorded in the state, which has experienced a surge in seismic activity in recent years, the U.S. Geological Survey (USGS) reported. The quake was followed by several aftershocks in the next 90 minutes, including one with a magnitude of 3.9, the USGS said. The first quake was felt from Kansas City, Missouri, to Dallas, Texas, but no damages or injuries were reported. The epicenter was near the East Campbell Gas Field and about 75 miles west of Cushing, Oklahoma. The USGS said it was not known if Saturday's quake was related to oil and gas production activities.  
Reuters, 15:49 February 13, 2016

## ***Natural Gas***

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### **Update: SoCalGas Begins the Process of Permanently Sealing Aliso Canyon Well February 15; Senator Calls for Independent Air Quality Testing**

Southern California Gas Co. (SoCalGas) on Monday announced that it began the process of permanently sealing the well at its Aliso Canyon storage facility. On December 4, 2015, SoCalGas commenced drilling a relief well to control the flow of natural gas by plugging the leaking well at its base. On February 11, the company pumped heavy fluids and successfully controlled the flow of gas out of the leaking well. On February 12, SoCalGas began to pump cement from the relief well into the base of the leaking well. Representatives from the California Division of Oil, Gas and Geothermal Resources (DOGGR) and other state and local agencies are at the site and are observing the operation to seal the well. The leak event will be officially terminated when DOGGR confirms that the well has been permanently sealed, a process that could take multiple days. As part of their independent responsibilities, the California Air Resources Board and the South Coast Air Quality Management District have been monitoring on an hourly basis methane levels in the community. Both agencies have reported an abrupt decline of methane levels in the community, consistent with the temporary control of the flow of gas on February 11. U.S. Sen. Barbara Boxer called Friday for third-party air quality testing to confirm that the leak has been permanently sealed and it's safe for residents to return home.

<https://www.alisoupdates.com/1443738507319/press-release-process-permanently-sealing-well-02152016.pdf>  
<http://www.pennenergy.com/articles/pennenergy/2016/02/u-s-senator-calls-for-backup-proof>

## Other News

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Nothing to report.

## International News

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### Colombia's 190-Mile Transandino Crude Oil Pipeline Attacked February 15

Colombia's Transandino pipeline, which transports crude from jungle oil fields in Putumayo province to the port of Tumaco, was bombed on Monday night, halting the pumping of crude oil. The blast sparked a large fire, Ecopetrol said. The army blamed the attack on the National Liberation Army (ELN) rebels. The ELN last week declared a 72-hour lockdown in areas where they operate, restricting transport and commerce. The rebels have been holding exploratory peace talks with the government for more than two years, but formal negotiations have yet to begin. Reuters, 11:27 February 16, 2016

### Iraq's Oil Output Hits Record 4.775 Million b/d in January – Oil Ministry

Iraq's oil production hit a record high in January, with crude output from all the country's fields, including in Kurdistan, averaging 4.775 million b/d, an oil ministry spokesman said on Tuesday. Oil exports via pipeline to Turkey from the northern fields under the control of the Kurdistan Regional Government produce about 600,000 b/d. January exports from southern terminals and by pipeline to Turkey's Ceyhan port averaged 3.9 million b/d. Reuters, 7:54 February 16, 2016

### Libyan Naval Forces in Tripoli Seize Foreign Tanker February 12

Libyan naval forces seized a Sierra Leone-flagged oil tanker on suspicion of illegally entering Libyan waters in an attempt to smuggle gasoline, authorities said on Saturday. The vessel, the Captain Khayyam, was stopped in Libyan waters on Friday night 25 miles northwest of Zuwarah city, and was carrying 1.6 million liters of gasoline, a spokesman for the naval forces allied to Tripoli's self-declared government said. Reuters, 12:08 February 13, 2016

### Saudi Arabia, Russia Agree to Freeze Oil Output

Russia and Saudi Arabia agreed on Tuesday to freeze output levels but said the deal was contingent on other producers joining in—a major sticking point with Iran absent from the talks and determined to raise production. The Saudi, Russian, Qatari, and Venezuelan oil ministers announced the proposal. It could become the first joint OPEC and non-OPEC deal in 15 years, aimed at tackling a growing oversupply of crude and helping prices recover from their lowest in over a decade. The Saudi Oil Minister said freezing production at January levels was an adequate measure and he hoped other producers would adopt the plan. Venezuela's Oil Minister said more talks would take place with Iran and Iraq on Wednesday in Tehran.

Reuters, 10:12 February 16, 2016

## Energy Prices

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U.S. Oil and Gas Prices			
February 16, 2016			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b> <b>West Texas Intermediate U.S.</b> \$/Barrel	29.00	27.91	52.97
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	2.07	2.22	2.87

Source: Reuters

## Links

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***This Week in Petroleum*** from the U.S. Energy Information Administration (EIA)

<http://www.eia.gov/oog/info/twip/twip.asp>

Updated every Wednesday.

***Weekly Petroleum Status Report*** from EIA

[http://www.eia.gov/oil\\_gas/petroleum/data\\_publications/weekly\\_petroleum\\_status\\_report/wpsr.html](http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html)

Updated after 10:30 AM & 1:00 PM ET every Wednesday.

***Natural Gas Weekly Update*** from EIA

<http://www.eia.gov/oog/info/ngw/ngupdate.asp>

Updated after 2:00 PM ET every Thursday.

### **ENERGY ASSURANCE DAILY**

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<http://www.oe.netl.doe.gov/ead.aspx>

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