



# ENERGY ASSURANCE DAILY

Wednesday Evening, May 03, 2017

## Electricity

### Update: Power Restoration Nears Completion May 3 after Strong Storm System Hits Central, Eastern U.S. April 29–May 1

Power restoration was continuing on Wednesday after a widespread storm system knocked out power to approximately 686,892 customers across the Central and Eastern U.S. beginning on April 29. The system produced rain, hail, high winds of up to 90 mph, several tornados, and snow in some areas, resulting in significant damage across 17 states. As of 3:30 p.m. EDT Wednesday, 29,875 customers remained without power. The vast majority of impacted customers across the Central U.S. had power restored on Tuesday, while the remaining outages, primarily in the Eastern states, should be restored by Thursday. FirstEnergy, which reported approximately 85,000 customer outages in Pennsylvania, said it expects the majority of impacted customers in both Pennsylvania and Ohio to be restored by late Wednesday night. NYSEG, which reported 30,000 customer outages in New York, said crews were continuing to repair the more than 500 downed wires and nearly 80 broken poles caused by the storm. The utility expects full restoration by 1:00 p.m. EDT, Thursday. The table below shows the latest reported outages by utility.

Central, Eastern U.S. Customer Power Outages April 29–May 3, 2017		
Electric Utility	State	Latest Reported
NYSEG	NY	7,096
National Grid	NY	2,791
FirstEnergy	OH	151
AEP Ohio	OH	758
FirstEnergy	PA	15,563
PPL	PA	1,143
Duquesne Light	PA	401
Appalachian Power	VA/WV	1,727
FirstEnergy	WV	245
<b>TOTAL*</b>		<b>29,875</b>

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

Sources:

<http://outagemap.appalachianpower.com.s3.amazonaws.com/external/default.html>

<http://outages.firstenergycorp.com/mdwv.html>

<http://outages.firstenergycorp.com/oh.html>

[https://twitter.com/W\\_Penn\\_Power](https://twitter.com/W_Penn_Power)

<https://twitter.com/OhioEdison>

<https://www.facebook.com/AEPOhio>

<http://outages.firstenergycorp.com/pa.html>

<http://www.nyseg.com/Outages/outageinformation.html>

<http://www.nyseg.com/OurCompany/News/2017/050217May1stormrestore10am.html>

<https://www.nationalgridus.com/Upstate-NY-Home/Storms-Outages/Outage-Map>

<https://omap.prod.pplweb.com/omap>

<https://www.facebook.com/PPLElectric>

<https://www.duquesnelight.com/outages/current-outages>

<http://www.npr.org/sections/thetwo-way/2017/05/01/526377499/severe-weather-kills-at-least-14-people>

[http://www.cleveland.com/weather/blog/index.ssf/2017/05/21000\\_firstenergy\\_customers\\_wi.html](http://www.cleveland.com/weather/blog/index.ssf/2017/05/21000_firstenergy_customers_wi.html)

<http://www.wfmj.com/story/35295047/storms-leave-outages-damage-in-ohio-moves-to-mercercounty>

<http://www.oe.netl.doe.gov/docs/eads/ead050217.pdf>

### **Entergy Reports Strong Storm Causing Power Outages in Louisiana May 3**

A strong storm producing heavy rain was moving across Louisiana on Wednesday afternoon and as of 4:00 p.m. EDT, approximately 17,183 Entergy Louisiana customers were without power. The heavy rain was causing flood conditions in many areas of the state.

<http://www.etrviewoutage.com/external/la.aspx>

<http://www.kplctv.com/story/35330261/live-blog-storm-damage-reports-across-southwest-louisiana>

### **Progress Energy's 872 MW Brunswick Nuclear Unit 1 in North Carolina Reduced to 76 Percent by May 3**

On the morning of May 2, the unit was operating at 93 percent.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

### **TVA's 1,125 MW Watts Bar Nuclear Unit 1 in Tennessee Shut May 2**

The unit shut from 15 percent due to a failed reactor coolant pump power transfer.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

<https://www.nrc.gov/reading-rm/doc-collections/event-status/event/2017/20170503en.html>

### **Update: TVA's 1,118 MW Browns Ferry Nuclear Unit 3 in Alabama at Full Power by May 3**

On the morning of May 2, the unit was operating at 68 percent, reduced from full power on April 30.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

### **Update: STP's 1,251 MW South Texas Nuclear Unit 1 in Texas at Full Power by May 3**

On the morning of May 2, the unit was operating at 89 percent, reduced from full power on April 28.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

## ***Petroleum***

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### **BP Shuts Blending Oil Unit at Its 413,500 b/d Whiting, Indiana Refinery May 3 – Sources**

BP Plc shut a blending oil unit for minor work at its Whiting, Indiana refinery on Wednesday, said sources familiar with plant operations. Refinery production was near capacity and unaffected by the outage of the unit, which treats jet fuel and gasoline feedstocks, the sources said.

Reuters, 9:25 May 3, 2017

### **CSB Report Finds 2015 Explosion at 151,300 b/d Torrance, California Refinery Was Preventable**

The U.S. Chemical Safety Board (CSB) on Wednesday released its final report into the February 18, 2015, explosion at the Torrance, California refinery, then owned by ExxonMobil. The report said weaknesses in the refinery's process safety management program led to the explosion. The blast, which the CSB said was preventable, caused serious property damage to the refinery and scattered catalyst dust up to a mile away from the facility into the nearby community. The incident caused the refinery to be run at limited capacity for over a year, raising gas prices in California and costing drivers in the state an estimated \$2.4 billion. The Torrance refinery supplies 20 percent of the gasoline in Southern California and 10 percent statewide. The explosion occurred when volatile hydrocarbons flowed backward through an idled fluidic catalytic cracking unit (FCCU) to a pollution control device called an electrostatic precipitator (ESP), the CSB found. The generation of sparks by the ESP ignited the hydrocarbons, setting off the explosion. In its final report, the CSB describes multiple gaps in the refinery's process safety management system, allowing for the operation of the FCCU without pre-established safe operating limits and criteria for a shut down. The refinery relied on safeguards that could not be verified, and reused a previous procedure deviation without a sufficient hazard analysis of the current process conditions. In July 2016, the Torrance refinery was sold by ExxonMobil to PBF Holdings Company, LLC, which now operates as the Torrance Refining Company. Since the February 2015 explosion, the refinery has experienced multiple incidents.

<http://www.csb.gov/csb-releases-final-report-into-2015-explosion-at-exxonmobil-refinery-in-torrance-california/>

Reuters, 15:33 May 3, 2017

## Natural Gas

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### Update: Colorado Explosion Caused by Leak in Gas Well Pipeline; Governor Orders Review of Statewide Oil, Gas Operations May 2

Colorado Governor John Hickenlooper on Tuesday called for a statewide review of existing oil and gas operations after investigators reported the home explosion in Firestone on April 17 was caused by odorless, unrefined natural gas leaking from a 1-inch flow line. The explosion killed two and critically injured one other. The underground line was believed to be out-of-service but was connected to an Anadarko-owned well within 200 feet of the house, fire investigators said. Although Anadarko owns the well, investigators said they do not know who was responsible for the unused pipeline. The line had been cut about 10 feet from the house but gas seeped through the ground and into the basement, where it exploded, state regulators said. Officials said they do not yet know why the line was connected to the well, or when and how it was cut. The Director of the Colorado Oil and Gas Conservation Commission said when a line is taken out of service—formally considered abandoned—it is supposed to be disconnected and sealed at both ends and all flammable gas is supposed to be removed. The Governor ordered inspections and tests of all active and abandoned gas pipelines within 1,000 feet of occupied buildings. Additionally, energy companies will be required to perform pressure tests, where the lines are sealed up and pressurized, so that any leaks will register as a drop in pressure. The Anadarko well has been shut down and officials say they don't believe any neighboring homes are in danger. Anadarko and Great Western Oil & Gas said last week they would shut down and inspect more than 3,060 similar wells as a precaution during the investigation.

<https://www.colorado.gov/governor/news/gov-hickenlooper-directs-review-statewide-oil-and-gas-operations-following-firestone-home>

Reuters, 12:01 May 3, 2017

## Other News

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Nothing to report.

## International News

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### Ecopetrol, Anadarko Announce Gas Find in Deep Caribbean Waters May 3

Colombian state oil company Ecopetrol said on Wednesday it discovered gas at an exploratory well it shares with Anadarko Petroleum Corp in the deep waters of the Caribbean Sea, creating the possibility of developing a production cluster. President Juan Manuel Santos said it was the biggest gas find in Colombia in 28 years and will allow the nation to be energy self-sufficient for the coming decades. Ecopetrol and Anadarko made the discovery in areas located between 12,057 and 14,485 feet below sea level in the south Caribbean Sea, close to the Kronos-1 and Purple Angel-1 wells in adjacent blocks.

<http://www.ecopetrol.com.co/wps/portal/es/ecopetrol-web/nuestra-empresa/sala-de-prensa/boletines-de-prensa/boletines-2017/boletines-2017/descubrimiento-exploratorio-Gorgon>

Reuters, 12:12 May 3, 2017

## Energy Prices

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U.S. Oil and Gas Prices			
May 3, 2017			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b> <b>West Texas Intermediate U.S.</b> \$/Barrel	47.79	49.22	43.60
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	3.11	2.96	1.91

Source: Reuters

## Links

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

<https://www.eia.gov/petroleum/weekly/>

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

<https://www.eia.gov/naturalgas/weekly/>

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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