

# Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

# **ENERGY ASSURANCE DAILY**

Thursday Evening, November 19, 2015

## Major Development

# Update: Over 157,000 Customers Remain Without Power in U.S. Pacific Northwest, British Columbia November 19 after Storm, High Winds Hit November 17–18

Power restoration was continuing Thursday to 651,471 customers in Washington, Oregon, Idaho, Montana, and British Columbia after a strong storm packing powerful winds hit Tuesday night. Wind gusts up to 49 mph were reported, toppling trees and power lines. As of 3:30 p.m. EST Thursday, 157,797 customers remained without power. Avista, at the height of the storm, reported more than 180,000 customers without power, which is nearly half of its electric customers. The company expects that it will take three to five days for all Avista customers to have their power restored. The company said 65 line crews were working on rotating shifts on restoration efforts. Kootenai Electric, which reported 10,471 customer outages, said it estimates that the majority of members north of Interstate 90 can expect to have their power restored within the next day or two. Puget Sound Energy, which reported about 210,000 outages, said power will be restored to most customers today, with repair efforts continuing in some hard hit areas through Friday and Saturday. Snohomish County PUD, which reported about 150,000 customers without power, said crews are working through the last of the larger jobs and starting on areas where extensive damage from this week's storm make repairs time-consuming, and which will have fewer customers restored per crew job.

Northwest, British Columbia Customer Power Outages  November 17–19, 2015				
Electric Utility	State	Peak	Latest Reported	
Avista	ID/WA	180,000	97,740	
Kootenai Electric	ID	10,471	7,430	
Portland General Electric	OR	28,000	1,506	
Puget Sound Electric	WA	210,000	10,021	
Snohomish PUD	WA	150,000	31,100	
BC Hydro	B.C.	73,000	10,000	
TOTAL*		651,471	157,797	

<sup>\*</sup>Total outages represent only electric utilities listed in this table.

#### Sources:

http://outagemap.myavista.com/external/default.html

 $\underline{\text{http://avistacorp.mwnewsroom.com/News/in/Avista-Crews-restore-power-to-about-60,000-custome/Avista-Cre$ 

continue-restoration-efforts-overnigh

http://www.kec.com/content/power-outage-updates

 $\underline{https://twitter.com/KootenaiEC?ref\_src=twsrc\%5Etfw}$ 

http://www.flatheadelectric.com/

https://pse.com/accountsandservices/ServiceAlert/Pages/Outage-Map.aspx

https://www.snopud.com/newsroom/StormUpdates.ashx?p=1180

https://twitter.com/snopud

https://www.portlandgeneral.com/safety\_outages/outage\_voutage\_updates/outage\_list.aspx

https://twitter.com/portlandgeneral

https://www.bchydro.com/power-outages/app/outage-list.html#current

http://www.reuters.com/article/2015/11/18/us-weather-seattle-

idUSKCN0T62UL20151118#mfrqsQYHu0lELDCh.97

http://www.weather.com/news/weather/news/northwest-high-winds-rain-snow-impacts

# Tropical Storm In-Fa Forecast to Track South of Guam, Damaging Winds Could Still Impact Island November 21

As of 4:00 p.m. EDT (5:00 a.m. ChST, Thursday), the National Weather Service forecasts damaging winds could impact Guam over the weekend. A tropical storm watch has been issued for the island. The storm is currently 400 miles southeast of Guam.

http://www.prh.noaa.gov/images/guam/errorTrack1.jpg

http://www.prh.noaa.gov/data/GUM/TCPPO1

http://www.prh.noaa.gov/guam/cyclone.php

### **Electricity**

### Update: Power Restoration Nearly Complete in Arkansas, Tennessee November 19 after Storms Hit November 17

Power restoration was nearly complete Thursday after strong storms knocked out power to 25,700 Entergy customers in Arkansas and 14,000 Memphis Light, Gas, and Water (MLGW) customers in Tennessee on Tuesday. As of 11 a.m. EST Thursday, 19 Entergy customers and 180 MLGW customers remained without power.

https://twitter.com/MLGW

http://azimuth.mlgw.org/OutageSummary.php

http://entergystormcenter.com/article.aspx?NR ID=769

http://www.etrviewoutage.com/external/mobile ar.html? ga=1.98624222.1905454175.1442207109

# **Update: Duke Energy's 846 MW Oconee Nuclear Unit 1 in South Carolina at Full Power by November 19**

On the morning of November 18 the unit was operating at 45 percent, reduced from full power on November 17. <a href="http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/">http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/</a>

# Update: Dominion's 810 MW Surry Nuclear Unit 1 in Virginia Restarts November 18, Ramps Up to 64 Percent by November 19

On the morning of November 18 the unit had restarted and was operating at 5 percent. The unit shut from full power on October 14 after a turbine trip.

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2015/20151014en.html

# FPL's 510 MW Point Beach Nuclear Unit 1 in Wisconsin Reduced to 67 Percent by November 19

On the morning of November 18 the unit was operating at full power.

http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/

# **Update: Entergy's 966 MW River Bend Nuclear Unit 1 in Louisiana Ramps Up to 98 Percent by November 19**

On the morning of November 18 the unit was operating at 78 percent, reduced from 88 percent on November 17. <a href="http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/">http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2015/</a>

### Petroleum

#### Phillips 66 Reports Unit Upset at 336,000 b/d Wood River, Illinois Refinery November 19

Phillips 66 reported a unit upset at its Wood River, Illinois refinery, according to a filing with the Illinois Emergency Management Agency.

Reuters, 4:07 November 19, 2015

# Valero Reports Startups, Shutdown at Its 86,000 b/d Ardmore, Oklahoma Refinery November 10, 11

Valero Energy Corp reported startup and excess sulfur dioxide from the no. 2 SRU incinerator on November 11. The company also reported a shutdown and excess nitrogen oxide from the crude atmospheric tower heater on November 10.

Reuters, 2:46 November 18, 2015

# ExxonMobil Reports Unit Startup at Its 344,600 b/d Beaumont, Texas Refinery November 18

ExxonMobil reported a unit startup at its Beaumont, Texas refinery, according to a community information line. Reuters, 8:46 November 18, 2015

# Shell Says Cooling Water Tower Leak Stopped at Its 316,600 b/d Deer Park, Texas Refinery November 19

Royal Dutch Shell Plc said the source of a leak at one of the cooling water towers has been identified and stopped at Deer Park, Texas refinery. Earlier in the day, Shell had reported a small leak at the refinery.

Reuters, 10:17 November 19, 2015 Reuters, 11:47 November 19, 2015

### Phillips 66 Reports Emissions at Its 247,000 b/d Sweeny, Texas Refinery November 18

Phillips 66 reported emissions from flare 29 at its Sweeny, Texas, refinery.

Reuters, 3:28 November 18, 2015

### Valero Reports Process Upset at Its 100,000 b/d Houston, Texas Refinery November 18

Valero Energy Corp reported a process upset resulting in hydrocarbon emissions associated with the refinery flare and atmospheric storage tank at its Houston, Texas refinery.

Reuters, 8:02 November 18, 2015

### ConocoPhillips Approves Funding for 30,000 b/d Arctic Reserve Project in Alaska

ConocoPhillips has approved funding for a \$900 million drilling project on Alaska's North Slope. The Alaska Dispatch News reported that when production begins in 2018 at the field in the National Petroleum Reserve-Alaska—an Indiana-sized Arctic reserve—the project is expected to yield 30,000 b/d of oil at its peak. Production would be the first time oil has flowed from federal lands on the reserve. The Bureau of Land Management (BLM) oversees the reserve and is working on a broad management plan in the area. The BLM permitted the project last month, after the U.S. Army Corps of Engineers approved a federal wetlands permit in January. The project will receive a tax incentive through the new oil portion of the state's tax regime passed in 2013. Reuters, 8:01 November 19, 2015

#### Natural Gas

# Regency Reports AGI Compressor Shut at Its 290 MMcf/d Waha Gas Plant in Texas November 18

Regency reported high differential pressure on the no. 1 contactor caused the plant to cut all inlet gas resulting in the shutdown of the acid gas injector (AGI) compressor. Multiple equipment/process issues occurred once gas was brought back in. All process and equipment issues were corrected. The production process was restarted and the AGI compressor was reset and restarted.

http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=223201

# Southern Union Reports Compressor Shut at Its 140 MMcf/d Keystone Gas Plant in Texas November 17

Southern Union reported compressor C-24 went down on a malfunction. All other compression was online and inlet gas had to go to flare. The starter was replaced but was still having issues restarting. Inlet gas was being minimized where possible to help reduce the amount flared.

http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=223141

#### Targa Reports AGC Shut at Its 150 MMcf/d Sand Hills Gas Plant in Texas November 17

Targa reports the acid gas compressor (AGC) was shut by the panel board for high fourth stage discharge pressure. This routed acid gas to the emergency acid gas flare, F-4. All the suction and discharge compressor valves on the fifth stage cylinder were replaced and the compressor was restarted. Once the AGC was restarted, flaring ceased at the emergency acid gas flare.

 $\underline{http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails\&target=223127$ 

### Study: New England Doesn't Need Additional Natural Gas Pipelines

Massachusetts' Attorney General on Wednesday released a study that found the New England region does not need additional natural gas pipelines to maintain a reliable flow of energy for the next 15 years. The report concludes that the region will be able to meet electricity needs through 2030, even on the coldest of winter days. Authors of the study said they took into consideration the recent announcement by the owners of the Pilgrim nuclear power plant in Plymouth that they planned to close by 2019, resulting in a loss of 680 MW of electricity. Tennessee Gas Pipeline Co., a subsidiary of Kinder Morgan Inc., which is seeking to bring a \$3.3 billion natural gas pipeline into New England through western Massachusetts and southern New Hampshire, labeled the study seriously flawed and said the recommendations would do nothing to lower the region's high electrical costs. The Attorney General sent a copy of the study to the Federal Energy Regulatory Commission, which is reviewing Kinder Morgan's pipeline proposal. <a href="http://www.mass.gov/ago/news-and-updates/press-releases/2015/2015-11-18-electric-reliability-study.html">http://www.mass.gov/ago/news-and-updates/press-releases/2015/2015-11-18-electric-reliability-study.html</a>
Reuters, 7:01 November 18, 2015

### Other News

Nothing to report.

### International News

Nothing to report.

### **Energy Prices**

U.S. Oil and Gas Prices  November 19, 2015				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	40.50	41.69	74.67	
NATURAL GAS Henry Hub \$/Million Btu	2.10	2.11	4.32	

Source: Reuters

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 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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