



ENERGY ASSURANCE DAILY

Friday Evening, March 25, 2016

Electricity

Update: Power Restoration Continues to Over 104,000 Customers March 25 after Winter Storm Knocks Out Power to Over 610,000 Customers from Colorado to Ontario March 23–24

Restoration efforts were continuing Friday after a severe winter storm impacted at least 610,925 customers from Colorado to Ontario, Canada. The system hit Colorado early on Wednesday morning, and moved northeastward Wednesday night across parts of the U.S. Midwest and into Ontario, Canada. Xcel Energy, the hardest hit utility with 305,174 customer outages, said it expects 100 percent restoration by the end of the day, Friday. Consumers Energy on Thursday night updated its total affected customers to 45,000 in Michigan and reported 117 wires down. In Ontario, Hydro One and PowerStream, which sustained additional impacts on Thursday evening, updated their total number of affected customers to 100,130 and 32,315, respectively. Both utilities said freezing rain, ice accumulation, wind, and debris damaged its power lines, and that conditions were hampering restoration efforts. Other utilities, including Great Lakes Energy and We Energies also reported higher affected numbers as a result of the storm. As of 3:30 p.m. EDT Friday, 104,504 customers remained without power. The table below shows total affected customers and the latest reported outages by utility. The “Affected” column shows the total count of customers that lost power at one point or another over the course of the storm for each utility. These outages may not have occurred concurrently and are not the same as peak outages.

| Central U.S. and Canadian Customer Power Outages | | | |
|---|-----------------------|-----------------|------------------------|
| March 23–25, 2016 | | | |
| Electric Utility | State/Province | Affected | Latest Reported |
| Xcel Energy | CO | 305,174 | 3,129 |
| United Power | CO | 32,000 | 200 |
| Poudre Valley REA | CO | 22,182 | 508 |
| Colorado Springs Utilities | CO | 6,957 | 0 |
| MidAmerican Energy | IA | 6,000 | 59 |
| Alliant Energy | IA | 4,166 | 6 |
| Commonwealth Edison | IL | 1,824 | 696 |
| Indiana and Michigan Power | IN | 7,472 | 175 |
| Kansas City Power and Light | KS | 9,000 | 1 |
| Consumers Energy | MI | 45,000 | 10,693 |
| Great Lakes Energy | MI | 11,580 | 19 |
| DTE | MI | 3,000 | 136 |
| NYSEG | NY | 2,780 | 6 |
| FirstEnergy | OH | 3,291 | 55 |
| AEP | OH | 1,054 | 45 |
| We Energies | WI | 16,000 | 65 |
| Alliant Energy | WI | 1,000 | 0 |
| Hydro One | Ontario | 100,130 | 72,505 |
| PowerStream | Ontario | 32,315 | 16,206 |
| TOTAL* | | 610,925 | 104,504 |

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

Sources:

<https://www.facebook.com/XcelEnergyCO/photos/a.186562419704.121935.108603389704/10154006332214705/?type=3&theater>

http://www.xcelenergy.com/Emergency_Notices/Colorado_power_outages

<https://twitter.com/XcelEnergyco>
http://www.outagemap-xcelenergy.com/outagemap/?_ga=1.219521565.546892019.1455647825
<http://www.unitedpower.com/news/>
<http://ebill.pvrea.com/oms/outageMap>
<http://www.pvrea.com/news-article?NewsID=71>
<https://twitter.com/CSUtilities>
<http://stormcenter3.csu.org.s3.amazonaws.com/default.html>
https://twitter.com/MidAm_EnergyCo
<https://www.midamericanenergy.com/OutageWatch/dsk.html>
<http://www.dteenergy.com/map/outage.html>
<http://outagemap.kcpl.com/external/default.html>
<https://www.facebook.com/consumersenergymichigan>
<https://www.consumersenergy.com/outagemap>
<https://www.facebook.com/greatlakesenergy>
<http://www.gtlakes.com/storm-central/>
<http://www.nyseg.com/Outages/outageinformation.html>
<https://www.aepohio.com/outages/outageMap.aspx>
<http://outages.firstenergycorp.com/oh.html>
<http://www.we-energies.com/outagemapext/>
<http://www.alliantenergy.com/Customerservice/StormandOutageCenter/OutageSummary/>
<http://www.hydroone.com/StormCenter3/>
<http://www.arcgis.com/apps/OnePane/basicviewer/index.html?appid=bde5d03a4b7d4097a59125a8b50117ac>
<https://twitter.com/PowerStreamNews>
<https://blog.powerstream.ca/2016/03/powerstream-working-restore-power-simcoe-county/>
<https://weather.com/storms/winter/news/winter-storm-selene-impacts>
<http://www.thestar.com/news/gta/2016/03/24/icy-conditions-leave-thousands-in-the-dark-force-school-closures-and-flight-cancellations.html>
<http://www.680news.com/2016/03/24/freezing-rain-arrives-schools-closed-parts-gta-power-restored-vaughan/>
http://www.denverpost.com/news/ci_29674905/xcel-energy-power-outages-affecting-55-000-customers
<http://www.cbs58.com/story/31555995/over-3000-without-power-including-milwaukees-third-ward>
<http://fox6now.com/2016/03/24/latest-thousands-of-we-energies-customers-without-power-possibly-due-to-weather/>
<http://www.detroitnews.com/story/news/local/michigan/2016/03/24/spring-storm-wintery-mix-snow-ice/82203056/>
http://www.mlive.com/news/ann-arbor/index.ssf/2016/03/2500_people_without_power_in_a.html

Exelon's 1,163 MW Byron Nuclear Unit 1 in Illinois Reduced to 66 Percent by March 25

On the morning of March 24 the unit was operating at full power.

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

Mountainview Power Company's 525 MW Gas-fired Unit 4 in California Reduced by March 24

The unit entered an unplanned curtailment of 285 MW.

<http://content.caiso.com/unitstatus/data/unitstatus201603241515.html>

Update: Exelon, Pepco Report Merger Officially Closed March 23

Exelon Corporation and Pepco Holdings Inc. announced that the two companies completed their merger transaction, effective March 23. The announcement follows the approval of the merger by the Public Service Commission of the District of Columbia (DC PSC) earlier Wednesday. The merger brings together Exelon's three electric and gas utilities—BGE, ComEd, and PECO—and Pepco Holdings' three electric and gas utilities—Atlantic City Electric, Delmarva Power, and Pepco—to create the leading mid-Atlantic electric and gas utility company. Exelon will provide a package of direct benefits—including bill credits, reliability improvements, and other investments—worth more than \$430 million for customers and communities in Delaware, the District of Columbia, Maryland, and New Jersey under the commitments made in those jurisdictions. The Pepco Holdings companies have joined the Exelon family of companies, and integration efforts are well underway. Atlantic City Electric, Delmarva Power, and Pepco will remain as separate companies and retain their local headquarters in New Jersey, Delaware, and Washington, D.C., respectively. Together with Exelon's other three utilities, they serve approximately 10 million customers across six jurisdictions. The transaction was approved by Pepco Holdings' shareholders, and regulatory approvals have been issued by the Federal Energy Regulatory Commission, the New Jersey Board of Public Utilities, the Delaware Public Service Commission, the Maryland Public Service Commission, and the Virginia State Corporation Commission, in addition to the DC PSC.

<http://www.exeloncorp.com/newsroom/merger-close>

NRC Warns TVA Over Work Environment at Its 1,125 MW Watts Bar Nuclear Power Plant in Tennessee March 23

The Nuclear Regulatory Commission (NRC) on Wednesday issued a letter to the Tennessee Valley Authority (TVA) indicating that a “chilled work environment” exists within the operations staff at the Watts Bar nuclear power plant near Spring City, Tennessee. An NRC review into the Watts Bar work environment found that some operations employees may have felt pressure to ignore safety concerns, and some licensed operators may have been unduly influenced and directed by sources external to the control room. The NRC held a meeting with TVA officials on March 22 to discuss the agency’s concerns and TVA’s corrective actions. TVA officials must respond to the letter within 30 days with a plan describing how the work environment concerns will be addressed.

<http://www.nrc.gov/reading-rm/doc-collections/news/2016/16-013.ii.pdf>

DOE Announces Participation in Clean Line’s 4,000 MW Wind Energy Transmission Project in Oklahoma, Texas March 25

The Secretary of Energy today announced that the Department of Energy (DOE) will participate in the development of the Plains & Eastern Clean Line Project (Clean Line), a major clean energy infrastructure project. The Clean Line project will tap abundant, low-cost wind generation resources in the Oklahoma and Texas panhandle regions to deliver up to 4,000 MW of wind power via a 705-mile direct current transmission line. This marks the first use of Congressional authority conferred to DOE as part of Section 1222 of the Energy Policy Act of 2005 with the objective of promoting transmission development. Congress passed this provision when it was becoming clear that our nation’s transmission infrastructure was beginning to show its age and needed modernization. The project will, if built, address infrastructure challenges outlined in the 2015 Quadrennial Energy Review (QER), which focused on Energy Transmission, Storage and Distribution Infrastructure. The QER found that new long-distance transmission capacity like Clean Line has the potential to enable lower-carbon electricity, enhance system reliability and operate at a reasonable cost to consumers.

<http://energy.gov/articles/energy-department-announces-participation-clean-line-s-large-scale-energy-transmission-1>

ISO New England to Become Hybrid Grid within Next Decade

ISO New England, the power grid operator for the six New England states, said on Thursday that over the next decade or so, it would transform into a hybrid grid with up to 20 percent of its resources comprising smaller power resources directly connected to customers or local utilities rather than the transmission system. The ISO said that about a third of 13,000 MW of proposed generation projects will leverage wind resources, but that its hybrid grid initiative would require major transmission system upgrades.

Reuters, 18:05 March 24, 2016

Petroleum

Workers Accept Contract Offer at ExxonMobil’s 560,500 b/d Baytown, Texas Refinery March 24 – Union Official

Workers at ExxonMobil Corp’s Baytown, Texas refinery and chemical plant voted on Thursday night to accept a contract extension offer, which union leaders had urged them to reject, a union official said. USW Local 13-2001 represents about 700 workers in three units at the Baytown complex. The Laboratory Unit, which accounts for about 10 percent of the workers represented by the USW at Baytown, voted to reject the offer and the union will continue to bargain on their behalf. Under the extension, Baytown refinery and chemical plant workers will receive a 3 percent increase in their hourly wages in 2016 and again in 2017 and a 3.5 percent increase in 2018. The increases are equal to those agreed to by the USW and U.S. refinery owners following a national strike in 2015. The pay increase in 2019 will be equal to that agreed to by the USW and refinery owners in talks expected to begin in January 2019. The Baytown extension will expire on May 15, 2020.

Reuters, 22:40 March 24, 2016

Valero Reports Process Unit Upset, Flaring at Its 335,000 b/d Port Arthur, Texas Refinery March 25

Valero reported a process unit upset resulted in excess emissions from flaring at its Port Arthur, Texas refinery.

Reuters, 13:42 March 25, 2016

Shell Says Operations Normal after Unit Startup at Its 156,400 b/d Martinez, California Refinery March 24

Royal Dutch Shell said operations were normal at its Martinez, California refinery after a unit startup.
Reuters, 17:24 March 24, 2016

U.S. Drillers Cut Oil, Gas Rigs for 14th Straight Week – Baker Hughes

U.S. energy firms this week cut oil and natural gas rigs for a 14th week in a row to the lowest level since at least 1940, Baker Hughes data showed on Thursday. Drillers cut 12 oil and gas rigs in the week to March 24, bringing the total rig count down to 464, the report said. That compares with 1,048 oil and gas rigs operating in the same week a year ago. Looking forward however, analysts forecast the rig count will bottom in a couple months before recovering later this year when they expect energy prices to rise.

<http://www.reuters.com/article/usa-rigs-baker-hughes-idUSL2N16U19U>

Natural Gas

CEC to Host Summer 2016 Energy Reliability Workshop in Response to Aliso Canyon Natural Gas Leak April 8

The California Energy Commission will conduct a joint workshop with the California Public Utilities Commission (CPUC), the California Independent System Operator (CAISO), and the Los Angeles Department of Water and Power (LADWP) to discuss the near-term natural gas and electricity reliability risks to the Los Angeles Basin as a result of the prohibition on natural gas injections and reduced operational limits at Southern California Gas Company's 86 Bcf Aliso Canyon storage facility following the nearly 4-month leak. The joint agency workshop, part of CEC's 2016 Integrated Energy Policy Report (IEPR) Update proceeding, will focus on energy reliability risks for the summer of 2016, including a presentation of the agencies' *Aliso Canyon Action Plan to Preserve Gas and Electric Reliability for Los Angeles Basin*, a draft plan describing local reliability risks and recommended near-term mitigation measures. In addition, the workshop will include a panel of utility representatives as well as large-scale energy users in order to provide further perspective on the draft action plan and potential reliability issues. In late summer or early fall, the agencies plan to hold another workshop focused on the 2016-2017 winter assessment. From an environmental perspective, discussion of the role of gas storage facilities and natural gas infrastructure in the state's long-term greenhouse gas reduction strategies will not be a topic of discussion at the reliability workshops. If Aliso Canyon remains unavailable indefinitely, those issues as well as long-term solutions to provide reliable natural gas and electricity service in the Los Angeles Basin will be addressed at subsequent workshops in 2017.

http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-02/TN210833_20160323T114742_Notice_of_Joint_Agency_Workshop_on_Aliso_Canyon.pdf?platform=hootsuite

EPA, Williams Ohio Valley Midstream Reach Settlement for 2015 Condensate Spill in Ohio River Tributary, West Virginia

The U.S. Environmental Protection Agency (EPA) on March 23 announced that Williams Ohio Valley Midstream, the owner and operator of a natural gas pipeline in Moundsville, West Virginia has paid a \$14,440 penalty to settle an alleged violation of the federal Clean Water Act (CWA) prohibiting discharges of oil to waterways. EPA cited the company for discharging natural gas condensate into a nearby waterway after a four-inch pipe ruptured at its facility in 2015. Immediately after the rupture, a sheen was observed on three local waterways, including Little Grave Creek, a tributary flowing into the Ohio River. Approximately 132 barrels of natural gas condensate was discharged.

<https://yosemite.epa.gov/opa/admpress.nsf/0/3a14de1961f1dc8185257f7f0056f890>

Other News

Nothing to report.

Delays at Venezuela's Main Crude Port Creates Vessels Backlog

Serious delays to load and unload vessels at Venezuela's main crude port has led to a backlog of tankers, which began last week and is now extending to the island of Curacao, according to traders, a union representative, and Thomson Reuters data. Some 70 tankers were anchored around state-run PDVSA's ports in Venezuela and the Caribbean, most of them waiting to load oil for exports and also to discharge imported crude and products, according to Thomson Reuters vessel tracking data. Venezuela exports 1.8 million b/d of crude with the U.S. and China as main destinations. A union leader and a legislator blamed technical problems with the Jose port's loading arms that are causing incremental delays for filling and discharging cargoes. Last week, reports surfaced indicating a government shutdown would occur during the week ending March 25 in order to cope with the country's on-going electricity crisis, specifically citing a prolonged drought affecting water levels at hydroelectric power plants. It was unclear whether the port delays were related to the shutdown or electricity generation issues.

http://www.downstreamtoday.com/news/article.aspx?a_id=51546

<https://www.oe.netl.doe.gov/docs/eads/ead031816.pdf>

Energy Prices

| U.S. Oil and Gas Prices | | | |
|--|-------|----------|----------|
| March 25, 2016 | | | |
| | Today | Week Ago | Year Ago |
| CRUDE OIL West Texas Intermediate U.S. \$/Barrel | 38.09 | 39.42 | 48.67 |
| NATURAL GAS Henry Hub \$/Million Btu | 1.72 | 1.82 | 2.78 |

Source: Reuters

Links

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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