



ENERGY ASSURANCE DAILY

Tuesday Evening, January 17, 2017

Electricity

Winter Storm Knocks Out Power to Nearly 72,000 Electric Customers in Central U.S. January 15–17

A winter storm that brought sleet and freezing rain to parts of the central U.S. over the weekend left 71,738 electric customers without power. In Kansas, Victory Electric and Midwest Energy were continuing to restore power Tuesday morning after the storm cut power to a combined 19,000 customers. Midwest Energy reported Tuesday it was working to restore two 115-kV lines affected by the storm. Out of the nearly 20,000 customers affected in Oklahoma, more than 17,000 were in Oklahoma Association of Electric Cooperatives’ service territory in northwestern Oklahoma. Crews were working to restore power to customers Tuesday. In Central and North Texas, approximately 33,000 Oncor customers lost power as severe storms moved through Sunday evening. As of 12:30 p.m. EST, 312 Oncor 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. Customer Power Outages [January 15 – January 17]			
Electric Utility	State	Affected	Latest Reported
Midwest Energy	KS	9,000	9,000
Victory Electric	KS	10,000	3,200
Oklahoma Association of Electric Cooperatives	OK	17,138	11,968
Oklahoma Gas and Electric	OK	2,600	1,371
Oncor	TX	33,000	312

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

Sources:

- <http://ksn.com/2017/01/16/thousands-around-dodge-city-without-power/>
- <https://www.facebook.com/VictoryElectric/>
- <https://www.facebook.com/MidwestEnergy/>
- <http://abcnews.go.com/US/wireStory/latest-kansas-missouri-oklahoma-deal-icy-weather-44792045>
- <http://okcfox.com/news/local/almost-17000-statewide-without-power-monday-morning>
- <http://okcfox.com/news/local/no-estimated-restoration-times-for-ice-storm-outages-in-woodward>
- <https://oge.com/wps/portal/oge/outages/systemwatch/>
- <http://www.cbs7.com/content/news/33000-customers-without-power-in-Texas-410823835.html>
- <http://www.star-telegram.com/news/local/community/fort-worth/article126698159.html#storylink=cpy>
- <http://stormcenter.oncor.com/external/default.html>

Update: PG&E Restores Power to Nearly All Its Customers Affected by Winter Storms in California by January 13

Pacific Gas and Electric Company (PG&E) on Friday reported nearly all its customers impacted by a series of “Atmospheric River” winter storms that struck Northern and Central California over the previous week had been restored. This was the largest storm series to impact PG&E’s service area in more than 6 years, the utility said. Crews continued to work around the clock to restore service for the remaining customers that experienced storm-related outages, especially those in locations with deep snow in the Sierra Nevada and foothills. PG&E restored service to approximately 680,000 customers that lost power since the storm series began on January 7. The utility expected all its customers would be restored by Friday, except for a small number where access would prevent restoration until Saturday. PG&E devoted more than 5,000 people to the response effort, including 38 mutual-aid crews from Washington, Oregon, and California.

https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20170113_nearly_all_pge_customers_restored_after_intense_winter_storms_subside

Breaker Problem Cuts Power to More Than 17,000 Carroll Electric Customers in Arkansas January 10

Carroll Electric reported on January 10 that 17,012 Benton County customers were without power due to a problem with the breaker. Carroll Electric rerouted power to turn the lower substations back on. The company expected all power to be restored within a couple of hours of the incident.

<http://www.nwahomepage.com/news/over-17000-without-power-in-benton-county/638915965>

Seattle City Light Investigates Cause after 22,000 Customers Lose Power January 16

Seattle City Light reported it was still investigating what caused 22,000 of its customers to lose power Monday afternoon. The utility had restored all but 6,000 outages within an hour, and fully restored power by midnight, according to its Twitter feed.

<http://patch.com/washington/seattle/large-power-outage-affecting-22-000-seattle>

<http://www.seattle.gov/light/mobile/outagemap.asp>

<https://twitter.com/SEACityLight>

FirstEnergy’s Pennsylvania Utilities Offer Demand Response Program for Business Customers

FirstEnergy Corp. Pennsylvania utilities, including Met-Ed, Penn Power, and West Penn Power, are now offering commercial and industrial customers a Demand Response Program that provides financial incentives to businesses that curtail their energy use when requested by the utility during peak hours. The program will operate from 2017 through 2020 during the summer months of June through September. Load reduction can include temporarily reducing or shutting down industrial processes, turning off lights in groups or sequences, reducing the use of HVAC systems, shutting down large motors and compressors, or starting back-up generation.

https://www.firstenergycorp.com/newsroom/news_releases/firstenergy-s-pennsylvania-utilities-offer-demand-response-progr.html

FirstEnergy Completes Substation Project to Boost Service Reliability for Electric Customers in Ohio

FirstEnergy on Monday announced that a \$30 million transmission project has been energized in Elyria, Ohio, to meet rising demand for electricity driven by commercial and industrial load growth in the area. The centerpiece of the project is a new 345/138-kV substation that will increase the electric capacity available to serve Ohio Edison customers in Elyria, Lorain, Sheffield Lake, and Vermilion, as well as provide FirstEnergy with greater flexibility to operate the local transmission network. The project also required the construction of eight transmission lines supported by 36 new tower structures, which were needed to connect existing power lines in the area to the new substation. The new facilities were energized ahead of a December 2016 in-service deadline. The project is part of FirstEnergy’s Energizing the Future initiative, a \$4.2 to \$5.8 billion investment program in electric transmission infrastructure between 2017–2021 that involves upgrading and strengthening the grid to meet the future demands of customers and communities. Key objectives include replacing existing equipment with advanced technologies designed to enhance system reliability; meeting projected load growth driven by shale gas-related activity, and other development in the region; as well as reinforcing the system in light of power plant deactivations.

https://www.firstenergycorp.com/newsroom/news_releases/firstenergy-completes-substation-project-to-boost-service-reliab.html

NMC's 522 MW Prairie Island Nuclear Unit 2 in Minnesota Reduced to 15 Percent by January 17

On the morning of January 16 the unit was operating at full power.

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

TVA's 1,155 MW Browns Ferry Nuclear Unit 1 in Alabama Reduced to 44 Percent by January 15

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

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

TVA's 1,126 MW Sequoyah Nuclear Unit 2 in Tennessee at Full Power by January 15

On the morning of January 14 the unit was operating at 80 percent.

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

CDWR's 237 MW Devil Canyon Hydro Units 1–4 in California Shut by January 16

The units entered an unplanned outage.

<http://content.aiso.com/unitstatus/data/unitstatus201701161515.html>

PG&E's 102 MW Electra Aggregate Hydro Units 1–2 in California Shut by January 16

The units entered an unplanned outage.

<http://content.aiso.com/unitstatus/data/unitstatus201701161515.html>

PCWA's 218 MW Middle Fork and Ralston Hydro Unit in California Shut by January 14

The unit entered an unplanned outage.

<http://content.aiso.com/unitstatus/data/unitstatus201701141515.html>

Entergy Reports Through-Wall Leak at Its 813 MW Fitzpatrick Nuclear Unit 1 in New York January 14

Operators reported that on Saturday, January 14, with the unit in Mode 2 at 0 percent power at the start of a refueling outage, inspectors identified a through-wall leak on the 3/4-inch vent line on a suction isolation valve, in the reactor system coolant loop inside the primary containment area, according to a filing with regulators. This condition constitutes a defect in the primary coolant system, the filing with the U.S. Nuclear Regulatory Commission said. The event notification was made in accordance with codes as “a condition that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded.” The licensee has notified the NRC Resident Inspector.

<https://www.nrc.gov/reading-rm/doc-collections/event-status/event/2017/20170117en.html>

Recurrent Energy Brings 100 MW Astoria and 75 MW Astoria 2 Solar Projects Online in California in Late 2016

Canadian Solar Inc. today announced that its wholly owned subsidiary Recurrent Energy has reached commercial operation of the adjacent 100 MW Astoria and 75 MW Astoria 2 solar projects located in Kern County, California. These projects, which began operating in late 2016, are part of Recurrent Energy's milestone 1.2 GW 2016 project portfolio. Pacific Gas and Electric Company will buy electricity and associated renewable energy credits (RECs) generated by the Astoria project under a long-term power purchase agreement. Electricity and associated RECs from the Astoria 2 project will be purchased by the Southern California Public Power Authority and four of its members (Cities of Azusa, Banning, Colton and Vernon), the Power and Water Resources Pooling Authority, and the Cities of Corona, Lodi, Moreno Valley, and Rancho Cucamonga.

<http://investors.canadiansolar.com/phoenix.zhtml?c=196781&p=irol-newsArticle&ID=2237739>

Midwest Energy Emissions Corp. Launches New Mercury Control Product Designed for Coal-Fired Power Utilities

Midwest Energy Emissions Corp. announced today that it is adding a new product to its mercury capture program that will reduce mercury emissions by preventing scrubber reemission events. The product is specifically designed for coal-fired power utilities with wet scrubbers to help remove mercury, as well as other metals, from the scrubber.

<http://www.midwestemissions.com/news-media/press-releases/detail/518/midwest-energy-emissions-corp-launches-new-mercury-control>

Enbridge Shuts 230,000 b/d Ozark Crude Oil Pipeline after Leak in Missouri January 14; Likely to Restart in a ‘Couple of Days’

Enbridge Inc. shut down and isolated its Ozark pipeline Monday following the release of approximately 365 barrels (15,330 gallons) of light oil in southwest Missouri. “At approximately 10:18 a.m. central time on January 14, a leak detection alarm notified workers of a potential release on Line 51, the Ozark pipeline, at the Lawrence Pump Station, in Lawrence County, Missouri,” an Enbridge spokeswoman said in an email. Enbridge said most of the release was contained on its own property, with some oil making its way into a drainage area. Clean-up efforts are underway and an investigation has begun to learn the cause of the release, the company said. On Tuesday, the company said that would likely return the pipeline to service in a couple of days. Enbridge also said that it had begun repair work on the pipeline, with crews performing additional checks along the pipeline upstream and downstream of the release site to ensure a safe re-start. The 22-inch Ozark pipeline, also known as Line 51, transports light crude oil from Cushing, Oklahoma, to Wood River, Illinois.

Reuters, 17:18 January 16, 2017

Reuters, 16:26 January 17, 2017

<http://seekingalpha.com/news/3235399-enbridge-shuts-ozark-pipeline-missouri-oil-leak>

<http://www.ky3.com/content/news/pipeline-spill-highway-closure-410842045.html>

PHMSA Completes Rulemaking That Boosts Safety Requirements to Strengthen the Operation, Maintenance, and Inspection of the Nation’s Hazardous Liquid Pipelines

The U.S. Department of Transportation’s Pipeline and Hazardous Materials Safety Administration (PHMSA) announced Friday that it has signed a long-awaited rulemaking package that makes critical safety improvements for hazardous liquid pipelines. The U.S. contains close to 200,000 miles of hazardous liquid pipelines near “high-consequence areas” (HCA), where failures have the highest potential for human or environmental damage. The rule signed Friday strengthens the standards that determine how operators repair aging and high-risk infrastructure, increases the quality and frequency of tests that assess the condition of pipelines, and extends leak detection requirements to onshore, non-HCA transmission hazardous liquid pipelines.

<http://www.phmsa.dot.gov/pipeline/phmsa-completes-rulemaking-that-boosts-safety-requirements-to-strengthen-the-operation-maintenance-and-inspection-of-the-nations-hazardous-liquid-pipelines>

<http://www.reuters.com/article/us-usa-pipeline-idUSKBN14X2CT>

Koch Cancels Muskwa SAGD Oil Sands Project in Alberta, Citing Economics and Environmental Regulation

Koch Oil Sands Operating ULC has applied to cancel its Muskwa SAGD oil sands project in northern Alberta, according to the Alberta Energy Regulator in December. It was the company’s second project withdrawal last year; the Dunkirk SAGD project north of Fort McMurray, Alberta was cancelled in March. “Koch Oil Sands Operating ULC does not believe the current- nor medium-term economic environment in Alberta will provide opportunity to generate an adequate return on the required capital for construction of the Muskwa SAGD project,” the letter says. “The longer-term risk of the project is further burdened with regulatory uncertainty around the Climate Leadership Program and its potential impacts on the project, from carbon tax to the emissions cap, both recently legislated by the Alberta government.”

<http://www.nationalobserver.com/2017/01/13/news/are-koch-brothers-playing-climate-politics-alberta>

<http://boereport.com/2016/12/16/read-koch-oil-sands-operating-letter-to-aer-requesting-cancellation-of-sagd-project-due-to-regulations-and-carbon-tax/>

Valero Reports Naphtha Spill at Its 225,000 b/d Texas City, Texas Refinery January 16

Valero Energy Corp. was cleaning up a spill of naphtha at its Texas City refinery Monday, according to messages posted by the City of Texas City Emergency Management Department. The naphtha was spilled early on Monday when a tank was overfilled at the refinery, according to the city department. A filing with the Texas Commission on Environmental Quality also reported the spill.

Reuters, 14:43 January 16, 2017

<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=250426>

Process Unit Upset Leads to Emissions at Valero's 335,000 b/d Port Arthur, Texas Refinery January 16

Valero Energy Corp. reported emissions from its Port Arthur refinery on Monday were due to an unspecified process unit upset, according to a filing with state regulators.

<http://www2.tceq.texas.gov/oce/ee/index.cfm?fuseaction=main.getDetails&target=250434>

Valero Reports HCU Shutdown, FCCU Emissions at Its 168,000 b/d McKee, Texas Refinery January 15

Valero Energy Corp. reported it shut a hydrocracker unit (HCU) at its McKee Refinery Sunday morning to reduce emissions, according to a filing with the Texas Commission on Environmental Quality. The filing also reported emissions from Complex 1, the fluidic catalytic cracking unit (FCCU), and HCU flare.

<http://www2.tceq.texas.gov/oce/ee/index.cfm?fuseaction=main.getDetails&target=250419>

BP's 413,500 b/d Whiting, Indiana Refinery Operating Normally after Minor Upset January 17 – Source

BP Plc's 413,500 b/d Whiting, Indiana refinery was operating normally on Tuesday following a minor upset, said a source familiar with plant operations. Energy industry intelligence service Genscape said the Whiting refinery used its safety flare system for about 15 minutes early on Tuesday morning.

Reuters, 09:32 January 17, 2017

Motiva Preps FCCU for Restart at Its 603,000 b/d Port Arthur, Texas Refinery January 15 after Shutdown January 14 Due to Pumping Catalyst Malfunction – Sources

Motiva Enterprises was preparing on Sunday the main gasoline-producing unit for restart at its 603,000 b/d Port Arthur, Texas refinery, said sources familiar with plant operations. The 81,000 b/d fluidic catalytic cracking unit 3 (FCCU 3) was shut on Saturday when the system pumping catalyst into the unit malfunctioned, the sources said. The Motiva Port Arthur refinery has only one FCCU.

Reuters, 13:24 January 15, 2017

Flint Hills Reports Several Units Shut at Its 295,630 b/d Corpus Christi, Texas West Refinery January 16

Flint Hills Resources reported that on Monday morning, the PSV on the 400-pound steam header at its Corpus Christi plant began relieving, leading to excess steam pressure, which caused instability within the refinery. Operators shut or reduced several units, sending several process gases to flare. Additionally, the SRU 3 experienced an upset due to the steam loss issue. Acid gases were shifted to SRU 2, resulting in unauthorized sulfur dioxide (SO₂) emissions from SRU 2 and SRU 3. The cause of the steam PSV relieving is still under investigation.

<http://www2.tceq.texas.gov/oce/ee/index.cfm?fuseaction=main.getDetails&target=250519>

Shell Restarting Unit at Its Scotford, Alberta Facility January 14

Royal Dutch Shell reported it was restarting a unit at its Scotford, Alberta facility on Saturday, according to a message on a community information line. The Scotford facility houses a 100,000 b/d refinery and a 255,000 b/d oil sands upgrader.

Reuters, 18:39 January 16, 2017

Update: ExxonMobil Restarts All Units at Its 344,600 b/d Beaumont, Texas Refinery January 17

ExxonMobil Corp. restarted a 120,000 b/d fluidic catalytic cracking unit, a 65,000 b/d hydrocracker unit, an 80,000 b/d reformer, and a 75,000 b/d reformer at its Beaumont plant Tuesday. The units had been offline since January 7, when cold weather affected compressors.

Reuters, 11:44 January 17, 2017

Update: PES Returns FCCU to Full Rates at Its 335,000 b/d Philadelphia, Pennsylvania Refinery – Source

Philadelphia Energy Solutions returned the 90,000 b/d gasoline-making fluidic catalytic cracking unit (FCCU) at the Girard Point section of its Philadelphia refinery to full rates on Tuesday, according to a source familiar with the plant's operations. The unit had been running at reduced rates since the end of December, following the shutdown of an associated boiler, which has been restarted, the source said. The boiler issue came as the company advanced work on a 44,000 b/d reformer and unifier unit, along with a 60,000 b/d hydrotreater, after a December fire in a separate section of the refinery known as Point Breeze. The unifier unit, known as the 864 unit, suffered the most damage and was not expected to be restarted until mid-February, a second source said on Tuesday. Work on the reformer was ahead of schedule, but cannot restart before the unifier, the source said. The company plans to restart the light ends unit, known as unit 862, by the end of next week, the source said.

Reuters, 14:21 January 17, 2017

Natural Gas

Regency Reports Emissions at Its 290 MMcf/d Waha Gas Plant in Texas January 15

Regency reported an absorber pump failure lead to emissions at its Waha plant on Sunday, according to a filing with the Texas Commission on Environmental Quality.

<http://www2.tceq.texas.gov/oce/ee/index.cfm?fuseaction=main.getDetails&target=250418>

Amine Treating System Snag Leads to Flaring at DCP Midstream's 160 MMcf/d Goldsmith Gas Plant in Texas January 15

DCP Midstream reported Sunday that unknown amounts of CO₂ generated from third-party gas producers caused problems with the amine treating system at the Goldsmith gas plant, according to a filing with state regulators. CO₂ causes foaming in the amine system, which impacts the level control throughout the unit and automatically shuts it down. Operators began flaring to keep the plant from going sour, the filing said.

<http://www2.tceq.texas.gov/oce/ee/index.cfm?fuseaction=main.getDetails&target=250415>

No Impacts Reported after DCP Midstream Natural Gas Pipeline Explodes Near Spearman, Texas January 16

Multiple fire crews battled a fire south of Spearman, Texas on Highway 207 after a natural gas pipeline exploded late Monday night, local media reported Tuesday. The fire was under control and was expected to burn itself out, the report said. The event did not disrupt local natural gas service or cause injuries, local reports said. The pipeline is part of a gathering station maintained by DCP Midstream. After the fire burns out and the area cools down, DCP crews will repair the line. Highway 207 remains open.

Reuters, 07:34 January 17, 2017

<http://www.newschannel10.com/story/34273558/developing-natural-gas-pipeline-explosion-outside-of-spearman>

Other News

Nothing to report.

International News

Statoil Announces New Oil and Gas Discovery in Norwegian Sea January 17

Statoil announced Tuesday it has made a new oil and gas discovery estimated between 20 and 80 million barrels in the Norwegian Sea, near Norne, in the licenses PL128/128D. Statoil began drilling the Cape Vulture exploration well in early December 2016 as part of a new exploration concept for the Nordland Ridge. Statoil is the operator with nearly 64 percent control, together with Petoro, which controls 24.55 percent, and Eni, which controls 11.5 percent.

<https://www.statoil.com/en/news/new-statoil-discovery-near-norne.html>

https://www.eni.com/en_IT/media/2017/01/eni-announces-an-oil-and-gas-discovery-in-norways-offshore

Officials Cite Weather, Storage as Libya's Oil Production Drops to 655,000 b/d January 15

Libya's oil production has dropped to 655,000 b/d due to difficulties, including a lack of storage capacity and poor weather, the head of the National Oil Corporation said on Saturday. NOC Chairman Mustafa Sanalla told reporters production had been more than 700,000 b/d over the past week, but then "unfortunately decreased due to bad weather and short storage capacities, as well as some technical problems in some fields." A deputy leader of the U.N.-backed government in Tripoli had put production at 750,000 b/d on Friday.
Reuters, 06:29 January 17, 2017

Blackout Hits Western and Southern Libya January 15

A blackout already affecting the south spread to western Libya on Saturday, impacting the capital, Tripoli, and other major cities, the national power company said. The blackout extended from Libya's western border with Tunisia to the city of Ajdabiya, nearly 900 km (560 miles) to the east, national power company GECOL said in a statement. The grid trouble began after a number of cities in western Libya rejected terms for sharing out power cuts, the company said. Tripoli and other cities in the west and south have been plagued by repeated and lengthy power cuts for months, and the south has been suffering a general blackout for at least the past four days. Officials have previously blamed the power cuts on technical problems, damage from Libya's low-intensity military conflict, sabotage, and distortions to electricity supply caused by armed groups diverting scarce power to their own neighborhoods.

Reuters, 06:21 January 14, 2017

Power Outage Halts Output at 315,000 b/d Tula Refinery in Mexico January 14

Mexico's second-biggest oil refinery was hit by a power outage that halted production, state oil company Pemex said on Saturday. The 315,000 b/d Tula refinery in Hidalgo state experienced an electricity failure that the company was working to fix, a Pemex spokesman said.

Reuters, 13:08 January 14, 2017

Oman Has Cut Oil Output by 45,000 b/d since December – Minister

Oman has cut its oil production by 45,000 b/d under the global agreement by producers to restrain output, the Omani oil and gas minister said Monday. OPEC and some non-OPEC producers, including Oman, Russia, Kazakhstan, and Azerbaijan, last December reached the first deal since 2001 to jointly curtail oil output.

Reuters, 03:52 January 16, 2017

Energy Prices

U.S. Oil and Gas Prices			
January 17, 2017			
	Today	Week Ago	Year Ago
CRUDE OIL			
West Texas Intermediate U.S. \$/Barrel	52.40	50.77	29.40
NATURAL GAS			
Henry Hub \$/Million Btu	3.36	3.12	2.19

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

Energy Assurance Daily provides a summary of public information concerning current energy issues. Published Monday through Friday to inform stakeholders of developments affecting energy systems, flows, and markets, it provides highlights of energy issues rather than a comprehensive coverage. *Energy Assurance Daily* is updated online Monday through Friday after 5:00 p.m. ET. For more information, visit the Infrastructure Security and Energy Restoration (ISER) website at:

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

Please direct comments and questions to: ead@oe.netl.doe.gov