



# ENERGY ASSURANCE DAILY

Monday Evening, December 28, 2015

## Electricity

### Strong Storms Knock Out Power to Over 434,000 Customers Primarily in Southwest and Midwest December 27–28

Strong storms producing damaging winds knocked out power to 434,851 customers Sunday and throughout Monday across multiple states in the South and Midwest. Freezing rain, sleet, snow, and strong winds of up to 70 mph were reported. As of 3:30 p.m. EST Monday, 345,538 customers remained without power. Public Service Company of Oklahoma (PSO), which reported 54,500 customers without power, said effort to make repairs and restore power to customers would continue today and likely last several more days. OG&E, which reported 54,201 customers without power, said there was more structural damage with this storm than with the last ice storm and it was bringing in additional crews to help with restoration. Scattered thunderstorms, some which will be strong to severe, will move east across southern Kentucky, Tennessee, northeast Mississippi, Alabama, west and north Georgia and the Florida Panhandle on Monday evening. A few severe storms may continue in parts of Georgia, northern South Carolina and North Carolina Monday night..

South, Midwest, New Mexico Customer Power Outages			
December 27–28, 2015			
Electric Utility	State	Peak	Latest Reported
Entergy Arkansas	AR	4,105	3,562
Ameren Illinois	IL	70,055	70,055
Commonwealth Edison	IL	15,122	15,122
Mid American Energy	IL	4,472	2,695
Northern Indiana Public Service Co (NIPSCO)	IN	28,600	28,600
Duke Indiana	IN	8,308	5,902
Indiana and Michigan Power	IN	10,030	10,030
Westar Energy	KS	5,126	3,034
Entergy Louisiana	LA	8,000	1,947
SWEPCO	LA	2,646	583
Indiana and Michigan Power	MI	4,159	1,232
Kansas City Power and Light	MO	3,425	1,064
Xcel Energy	NM/TX	36,000	1,847
Oklahoma Association of Electric Cooperatives	OK	82,000	82,000
Public Service of Oklahoma	OK	54,500	46,217
OG&E	OK	54,201	45,059
Municipal Electric Utilities	OK	10,838	4,600
Memphis Light Gas and Water	TN	8,603	7,938
AEP Texas	TX	15,000	7,558
SWEPCO	TX	8,503	5,801
CenterPoint Energy	TX	1,158	692
<b>TOTAL*</b>		<b>434,851</b>	<b>345,538</b>

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

Sources:

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

<http://apps.ameren.com/outage/outagemap.aspx?state=IL>

<https://twitter.com/AmerenIllinois>

[https://www.comed.com/ layouts/comedsp/OutageMap.aspx](https://www.comed.com/layouts/comedsp/OutageMap.aspx)

<https://twitter.com/ComEd>  
<https://www.midamericanenergy.com/outagewatch/dsk.html>  
<http://outagemap.duke-energy.com/in/default.html>  
<https://www.indianamichiganpower.com/outages/outageMap.aspx>  
<http://www.nipscooutages.com/WSSNisourceOutageMap/outagemap.html?action=city&reloaded=true>  
<http://outagemap.westarenergy.com/external/default.html>  
<http://www.etrviewoutage.com/external/la.aspx>  
<https://twitter.com/EntergyLA>  
<https://www.swepco.com/outages/outageMap.aspx>  
<http://outagemap.kcpl.com/external/default.html>  
<https://twitter.com/OAECOops>  
<http://ompa.com/2015/12/storms-cause-outages-across-state/>  
<https://www.psoklahoma.com/outages/details.aspx?stormName=December+27+Winter+Storm+in+Western+Oklahoma>  
<https://www.psoklahoma.com/outages/outageMap.aspx>  
[https://oge.com/wps/portal/oge/outages/systemwatch!/ut/p/a1/04\\_Sj9CP](https://oge.com/wps/portal/oge/outages/systemwatch!/ut/p/a1/04_Sj9CP)  
<http://azimuth.mlgw.org/OutageSummary.php>  
<https://www.aeptexas.com/outages/outageMap.aspx>  
<https://www.aeptexas.com/info/news/viewRelease.aspx?releaseID=1884>  
<http://gis.centerpointenergy.com/outagetracker/>  
<http://kfyo.com/thousands-of-xcel-energy-customers-without-power-in-clovis-texas-new-mexico-region/>  
<http://www.koco.com/news/3700-oge-customers-without-power-during-winter-storm/37146424>

### **Update: Consumers Energy Says Restoration Nearly Complete to 183,000 Customers in Michigan December 28 after Snowstorm Hit December 24**

Consumers Energy said restoration was nearly complete to more than 183,000 customers who were affected by a powerful storm on December 24. For the hardest hit areas in Northeast Michigan, including portions of Alcona, Iosco, Gladwin, Ogema, Oscoda, and Roscommon counties, restoration will continue into Monday. The storm, with reported wind gusts up to 60 mph, brought down trees and damaged or destroyed hundreds of utility poles. As of 3:30 p.m. EST Monday, 2,135 customers remained without power.

<https://www.consumersenergy.com/News.aspx?id=8365&year=2015>  
<http://www.detroitnews.com/story/news/michigan/2015/12/27/power-restoration-continues-severe-storms/77941074/>

### **Windstorm Knocks Out Power to Over 96,000 Hydro One Customers in Ontario December 24**

Hydro One reported 96,900 customers were without power on December 24 after a windstorm inflicted extensive damage to its electrical distribution system across northern and central Ontario. By December 25, Hydro One had restored power to 91,368 of its customers and full restoration was completed by December 26.

<http://www.hydroone.com/OurCompany/MediaCentre/Pages/Newsroom.aspx>  
<http://www.hydroone.com/StormCenter3/>  
<http://hydroone.mediaroom.com/2015-12-24-Hydro-One-restores-power-to-over-49-300-customers>  
<http://globalnews.ca/news/2421012/nearly-100000-people-without-power-on-christmas-in-quebec-ontario/>

### **SCE Reports Brief Power Outage to Over 20,000 Customers in California December 25**

Southern California Edison (SCE) on Friday reported 20,083 customers in the Victorville and Hesperia areas had their power knocked out from 30 seconds to just over 5 minutes. The temporary outages were caused by a bird that flew into a substation and interfered with electrical equipment.

<https://www.sce.com/wps/portal/home/outage-center/outage-map/outage-list-view>  
<http://www.vvng.com/brief-power-outage-christmas-morning-impacts-over-20000-customers/>

### **TVA's 1,125 MW Sequoyah Nuclear Unit 1 in Tennessee Shut by December 27**

On the morning of December 26 the unit was operating at 34 percent, reduced from 47 percent on December 25.

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

### **Desert Sunlight's 300 MW Solar Unit in California Shut by December 27**

The unit entered an unplanned outage.

<http://content.aiso.com/unitstatus/data/unitstatus201512271515.html>

## **NRC Reports GCA Contractors Skipped 10 Months of Fire Inspections at Entergy's 1,075 Waterford Nuclear Unit 3 in Louisiana**

Following a 15-month investigation, the Nuclear Regulatory Commission (NRC) reported on December 23 that contractors at Entergy's Waterford nuclear power plant in Killona, Louisiana failed to conduct required, hourly fire inspections on unit 3 and falsified reports for 10 months to prove inspections occurred. Officials also determined that an Entergy supervisor deliberately failed to identify and take corrective actions after being provided with suspected wrongdoing by GCA Contractors.

[http://www.nola.com/environment/index.ssf/2015/12/contractors\\_skipped\\_fire\\_inspe.html](http://www.nola.com/environment/index.ssf/2015/12/contractors_skipped_fire_inspe.html)

## ***Petroleum***

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### **Severe Weather Affects Phillips 66, Kinder Morgan Refined Product Flows in Midwest – Sources**

Severe weather in parts of the Midwest United States has disrupted regional shipments of some refined products as well as crude oil. Storms caused a power outage at Phillips 66's refined products distribution truck rack in Ponca City, Oklahoma, and the company has not yet provided a timeline for a return to normal operations, a source familiar with the matter said. The Phillips 66 truck rack in North Wichita, Kansas, was also shut due to an ice storm, but expected to return to service at noon CST, and its Glenpool, Oklahoma truck rack was closed due to flooding and not expected to return to service until Tuesday morning, the source said. A representative for Phillips 66 said it had not experienced any operational problems due to weather. Kinder Morgan said it had closed terminals in St. Louis and in Sauget and Rockwood, Illinois, but expects those terminals to be operational again as soon as floodwaters subside. In Cushing, Oklahoma truck deliveries slowed due to dangerous road conditions, according to a source familiar with operations in the area. Although the majority of oil is piped into Cushing, truck deliveries can total between roughly 25,000 to 50,000 b/d, according to sources.

Reuters, 12:11 December 28, 2015

### **Snow Slows Truck Traffic in Permian Basin, Crude Output Affected in Oklahoma, Texas, and New Mexico – Reuters**

A snowstorm dumped around two feet of snow in parts of the Permian Basin in West Texas and New Mexico over the weekend, hindering some crude output and leaving dangerous roads conditions for trucks heading to and from oil wells, forecasters and companies said on Monday. Snow had stopped accumulating by Monday afternoon but "travel continues to be impacted as most roads are slick and snow-covered," and some roads across southeastern New Mexico were still closed, according to a notice from the National Weather Service's Midland, Texas, office. Crude oil exploration and production companies including Pioneer Natural Resources and Apache said they were still assessing the storm's effect on operations, which may take several days. Devon Energy said it was "experiencing some weather-related impact to its production" in Texas, New Mexico and Oklahoma, but the company could not yet provide a detailed assessment, according to a spokesman. Temperatures warmed on Monday, but overnight temperatures were expected to again dip below freezing, causing melting snow and ice on roads to re-freeze, a situation that is expected to create more hazardous road conditions on Monday night and Tuesday morning, according to the National Weather Service. Representatives for other large Permian operators including Chevron and Occidental Petroleum did not immediately respond to a request for comment.

Reuters, 15:19 December 28, 2015

### **HollyFrontier's 138,000 b/d El Dorado, Kansas Refinery Returns to Normal Operation – Source**

HollyFrontier resumed normal operations at its refinery in El Dorado, Kansas after a reported problem with a sulfur recovery unit earlier this month forced production cuts, according to a source familiar with the plant's operations. The sulfur recovery unit has been restarted, the source said.

Reuters, 11:13 December 28, 2015

### **Update: Tesoro Says Unplanned Maintenance Complete, Operations Normal at Its 120,000 b/d Anacortes, Washington Refinery December 24**

Tesoro Corp said unplanned maintenance was complete and operations were normal at its Anacortes, Washington refinery.

Reuters, 2:24 December 24, 2015

## **Taylor Energy to Hold Meeting on Decade-Old Oil Leak in Gulf of Mexico**

Taylor Energy Co., which is responsible for a decade-old oil leak in the Gulf of Mexico, will hold a public meeting on January 20 to disclose details of its efforts to stop chronic slicks from forming off Louisiana's coast. The forum in Baton Rouge was a requirement of Taylor Energy's court settlement in September with environmental groups, which accused the company of withholding information about the leak and its efforts to end it. In 2004, waves whipped up by Hurricane Ivan triggered an underwater mudslide that toppled a Taylor Energy-owned platform and buried a cluster of its oil wells under mounds of sediment. Oil is still leaking at the site more than 11 years later.  
Reuters, 13:01 December 28, 2015

## ***Natural Gas***

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### **ExxonMobil Reports Units Shut at Its 65 MMcf/d Dollarhide Gas Plant in Texas December 27**

ExxonMobil reported several units shutdown due to after cold temperatures thickened lubricating oil to the point that the lube pump could not operate properly. All available wells were shut-in to reduce and mitigate flaring.  
<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=224970>

### **Enbridge Reports Condensate Stabilizer Shut at Its Pittsburg Gas Plant in Texas December 27**

Enbridge reported the condensate stabilizer shut due to a loose wire in the control panel. Enbridge operators reduced inlet rates, troubleshot the cause, and returned the stabilizer to service.  
<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=224982>

### **Southern Union Reports Units Shut at Its Keystone Gas Plant in Texas December 26**

Southern Union reported unit 24 was shut for rod load, unit 2 Emperor was shut for low second stage discharge pressure, and unit 3 Emperor was shut for a high inlet air temperature alarm. Maintenance was repairing the units.  
<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=224971>

### **DCP Midstream Reports Excess Emissions at Its 160 MMcf/d Goldsmith Gas Plant in Texas December 26**

DCP Midstream reported severe weather caused a third party power outage at the plant. The plant had to wait for the city of Goldsmith to regain electricity to resume operations.  
<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=224979>

### **Enable Gas Issues Force Majeure on Its Line OM-1 in Arkansas December 28**

Enable Gas Transmission (EGT) issued force majeure due to unstable soil affecting an 18 mile section of its Line OM-1 in northwest Arkansas. The company said it has taken the section of Line OM-1 out of service while it assesses the extent of potential damage to the affected line and performs any necessary repairs.  
<http://pipelines.enablemidstream.com/viewReport.aspx?Pipeline=EGT&>

## ***Other News***

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Nothing to report.

## ***International News***

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### **Iraq Seeks Infrastructure Investment for Integrated South Enhanced Oil Recovery Project**

Iraq has approached PetroChina and ExxonMobil about investing in the Integrated South Project which will consist of building oil pipelines, storage facilities, and a seawater supply project to inject water from the Persian Gulf to maintain pressure and enhance oil recovery. State-run South Oil Co. (SOC) is seeking investment from either or both of the companies to build infrastructure needed to raise output from its smaller southern oilfields, the SOC Deputy Chairman said. The enhanced recovery project targets the Luhais, Nassiriya, Tuba, Nahr Bin Umar, and Artawi oilfields, which are producing about 240,000 b/d currently. The SOC's initial plan aims to enhance production to around 350,000 b/d in 2016.  
Reuters, 8:15 December 28, 2015

## Saudi Arabia Posts \$98 Billion Deficit, Raises Fuel Prices

Saudi Arabia on Monday said this year's budget deficit amounted to \$98 billion as lower oil prices cut into the government's main source of revenue, prompting the kingdom to scale back spending for the coming year and hike up petrol prices. A royal decree announced that petrol prices would go up by 50 percent effective Tuesday. Even with that jump, Saudis will pay just 24 cents for a liter of 95 octane gasoline, which equates to less than a dollar per gallon. The Saudi-based Jadwa Investment estimates the government spends around \$61 billion in energy subsidies annually, almost \$11 billion of that on gasoline subsidies alone. For two consecutive years the kingdom has posted a deficit, and it is planning for another budget shortfall next year, projected at \$87 billion. When oil prices steeply dropped in 1986, Saudi Arabia ran a budget deficit for some 15 years, significantly increasing public and external debt until oil prices finally recovered in the 2000s.

Reuters, 14:02 December 28, 2015

## Uranium Prices Set to Increase after Paris Climate Deal Boosts Global Nuclear Dependence

Uranium has been gradually recovering from a sharp price decline in the wake of Japan's Fukushima disaster in 2011, and has gained this year as several other commodities slumped due to oversupply and concerns about Chinese economic growth and U.S. monetary tightening. It is expected to climb further, according to analysts, after governments forged a landmark agreement to reduce green gas emissions at a global climate summit in Paris last month—a move that supports nuclear power generation. Nuclear power stations currently provide around 11 percent of the world's electricity, but that share is expected to increase as China and India expand their capabilities. China plans to build six to eight nuclear power plants per year for the next five years, while India aims to generate 25 percent of its electricity from nuclear by 2050, up from 4 percent in 2013. Meanwhile Japan is restarting four reactors, which may accelerate the country's return to atomic energy. Prospects of higher demand and strategic stockpiling from U.S. utilities sent spot prices to an average of \$39 a pound in 2015, up 18 percent from \$33 last year, making it the best-performing metal of the year and one of the few commodities to post a yearly increase. Kazakhstan, the world's biggest uranium producer, has just signed cooperation agreements with Chinese companies to build a nuclear fuel plant in the central Asian country, while Canada's Cameco, the world's largest listed uranium mining company, signed a five-year deal in April to supply fuel to Indian nuclear reactors. Uranium prices plunged after a major earthquake and tsunami in Japan disabled the power supply of three Fukushima reactors, causing a meltdown and the release of radioactive material in March 2011. From around \$60 before the disaster, they hit a nine-year low of \$28 in 2014. Although the steep price decline resulted in mining cuts and delays and cancellations of projects, stockpiles remain large. Analysts' estimates of the global market surplus range from 20 million to 27 million pounds in 2015, which they say is likely to fall to between 7.5 million and 10 million by 2020. Kazakhstan is the world's biggest uranium producer, followed by Canada and Australia, while the United States is the biggest consumer, followed by France and China.

Reuters, 3:00 December 28, 2015

## Energy Prices

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<b>U.S. Oil and Gas Prices</b>			
December 28, 2015			
	<b>Today</b>	<b>Week Ago</b>	<b>Year Ago</b>
<b>CRUDE OIL</b> <b>West Texas Intermediate U.S.</b> \$/Barrel	36.26	34.50	55.45
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	1.53	1.70	2.97

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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