



U.S. DEPARTMENT OF ENERGY  
Office of Electricity Delivery and Energy Reliability  
Infrastructure Security and Energy Restoration

# ENERGY ASSURANCE DAILY

Thursday Evening, December 27, 2012

## Electricity

### Update: More Than 167,000 Utility Customers Remain without Power as Winter Storm System Continues Northeastern Track December 27

A powerful winter storm system continued its northeastern track Thursday, bringing heavy snowfall across the upper Mid-Atlantic and New England but brought no new outages of significance. The storm system had knocked out power to more than 460,000 customers from Texas to Connecticut by early Wednesday, before tapering off somewhat as it moved north. As of 3:30 p.m. EST today, 167,564 utility customers remained without power. Arkansas has been the hardest-hit by the storms, which brought freezing rain, sleet, snow, and high winds since Tuesday. More than 150,000 utility customers in Arkansas remained without power Thursday afternoon. Entergy on Wednesday reported the storms caused extensive damage to the utility's electrical infrastructure in Arkansas. The company has requested nearly 4,000 additional workers to assist with restoration efforts, but dangerous road conditions, traffic congestion, and the threat of falling trees and limbs were making it difficult for crews to begin restoration work in earnest. The utility expects that restoring power will be "a long and pain-staking process," and customers in areas with the heaviest damage should expect an extended outage of seven or more days. Most affected customers will be restored sooner.

U.S. Gulf Coast, Mid-Atlantic, and Northeast Customer Power Outages			
December 25–27			
Electric Utility	State	Peak	Latest Reported
Alabama Power Co.	AL	47,500	2,100
AEP – SWEPSCO	AR, LA, TX	13,859	1,896
Entergy – Arkansas	AR	190,492	135,728
First Electric Cooperative	AR	30,000	18,000
Jersey Central Power & Light	NJ	7,400	2,062
Dominion Virginia	VA, NC	2,615	1,505
AEP – Appalachian	WV, VA	20,008	6,273
<b>TOTAL*</b>		<b>311,874</b>	<b>167,564</b>

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

Sources:

<http://www.hpc.ncep.noaa.gov/discussions/nfdsc2.html>

[http://www.entergy.com/news\\_room/newsrelease.aspx?NR\\_ID=2634](http://www.entergy.com/news_room/newsrelease.aspx?NR_ID=2634)

<https://twitter.com/alabamapower>

<https://www.swepco.com/outages/>

<http://viewoutage.entergy.com/ar.aspx>

<http://outage.fecc.coop/>

[http://arkansasmatters.com/fulltext?nxd\\_id=621652](http://arkansasmatters.com/fulltext?nxd_id=621652)

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

<http://www.nbcnewyork.com/news/local/Winter-Storm-Weather-Snow-Forecast-New-York-City-New-Jersey-184913041.html>

<https://www.dom.com/storm-center/dominion-electric-outage-summary.jsp>

<https://www.appalachianpower.com/outages/Default.aspx>

### **Update: TVA's 1,118 MW Browns Ferry Nuclear Unit 2 in Alabama Ramped Up to 78 Percent by December 27**

Browns Ferry Unit 2 is returning from an outage that began December 22 when the unit automatically scrambled due to actuation of the Reactor Protection System (RPS) from loss of power to RPS. A control board had unexpectedly de-energized during post-maintenance testing, resulting in loss of power to the RPS. Operators restarted Unit 2 by December 26.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2012/>

### **Electrical Malfunction Shuts Luminant's 793 MW Martin Lake Coal-Fired Unit 1 in Texas December 26**

Luminant reported an electrical malfunction caused Martin Lake Unit 1 to trip while at load Wednesday afternoon, according to a filing with the Texas Commission on Environmental Quality. An electrical malfunction grounded the A thru E coal ball mills and the Alpha water circulating pump, causing a boiler swing, which automatically tripped the unit.

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=177460>

### **Calpine's 593 MW Metcalf Natural Gas-Fired Unit in California Shut by December 26**

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201212261515.html>

### **San Diego Gas & Electric's 575 MW Palomar Natural Gas-Fired Unit in California Reduced by December 26**

The unit entered an unplanned curtailment of 300 MW.

<http://content.caiso.com/unitstatus/data/unitstatus201212261515.html>

## ***Petroleum***

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### **Power Outage Causes Partial Shutdown of Sulfur Recovery System at Citgo's 163,000 b/d Corpus Christi, Texas Refinery December 27**

Citgo Petroleum Corp. reported a power outage resulted in a partial shutdown of the sulfur recovery system at the West Plant of its Corpus Christi refinery Thursday morning, according to a filing with the Texas Commission on Environmental Quality. This caused elevated levels of hydrogen sulfide in fuel gas and increased sulfur dioxide emissions from the unit's heater stacks. The West Plant's fuel gas treating system, sulfur recovery unit (SRU), SRU incinerator, and sulfur recovery system are all listed as sources of emissions. Operators placed the units in circulations and took steps to reduce fuel gas usage.

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=177474>

### **Valero Reports Brief Flaring But No Impact at Its 171,000 b/d Sunray, Texas Refinery December 26**

Valero Energy Corp. reported that hydrogen sulfide released to the flare at its McKee refinery in Sunray, Texas Wednesday evening due to an unspecified "upset when the flare was over-steamed," according to a filing with the U.S. National Response Center. A spokesman said the refinery's acid plant experienced "brief flaring," but there was no material impact to production.

DJN, 10:25 December 27, 2012

[http://www.nrc.uscg.mil/reports/rwservlet?standard\\_web+inc\\_seq=1034218](http://www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=1034218)

### **Citgo Reports Coker Unit Emissions at Its 429,500 b/d Lake Charles, Louisiana Refinery December 26**

Citgo Petroleum Corp. reported a release of "various materials" from a coker unit at its Lake Charles refinery on Wednesday was due to unknown causes, according to a filing with the U.S. National Response Center. Operators were investigating the incident.

[http://www.nrc.uscg.mil/reports/rwservlet?standard\\_web+inc\\_seq=1034214](http://www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=1034214)

## **ExxonMobil Reports Flaring During Startup after Unplanned Shutdown at Its 238,600 b/d Joliet, Illinois Refinery December 26**

ExxonMobil Corp. reported ongoing flaring at its Joliet refinery during restart procedures after an unplanned shutdown on Wednesday, according to a filing with the U.S. National Response Center.

[http://www.nrc.uscg.mil/reports/rwervlet?standard\\_web+inc\\_seq=1034175](http://www.nrc.uscg.mil/reports/rwervlet?standard_web+inc_seq=1034175)

## **Power Outage Cause Sulfur Dioxide Emissions at Shell's 156,400 b/d Martinez, California Refinery December 25**

Royal Dutch Shell reported a power outage triggered flaring and a release of sulfur dioxide at its Martinez refinery on Tuesday, according to a filing with the California Emergency Management Agency.

Reuters, 18:00 December 25, 2012

## **Natural Gas**

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### **Enterprise to Begin Open Season for Proposed Expansion of Panola NGL Pipeline System in Texas**

Enterprise Products Partners L.P. affiliate Panola Pipeline Company, LLC today announced the start of a binding open season to seek shipper support for a proposed expansion of the Carthage-to-Lufkin segment of its natural gas liquids (NGL) pipeline system. The Panola Pipeline is a 181-mile pipeline that originates near Carthage, Texas and supports the Haynesville and Cotton Valley oil and gas production areas. The pipeline extends to destination points at Mont Belvieu, Texas, enabling shippers to access the NGL fractionation complex there, including facilities owned and operated by Enterprise. Depending on shipper response to the open season, the Panola expansion project will be designed to accommodate approximately 15,000 b/d of incremental capacity. Achieving the additional capacity would involve installing pumps and related equipment. The additional capacity would be available mid-to-late second quarter of 2013.

<http://phx.corporate-ir.net/phoenix.zhtml?c=80547&p=irol-newsArticle&ID=1769776>

### **Regency Reports Numerous AGI Compressor Shutdowns at Its 290 MMcf/d Waha Gas Plant in Texas December 20–25**

Regency Energy Partners reported numerous acid gas injector (AGI) compressor shutdowns at its Waha plant over a period of five days, from December 20–25, according to filings with the Texas Commission on Environmental Quality. The outages were caused by amine system upsets, fifth-stage scrubber malfunctions, and in one case on December 22, the AGI compressor shut due to a complete purchase power outage.

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177400>

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177401>

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177429>

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177434>

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177445>

### **Exterran Reports Flaring at Its 65 MMcf/d Dollarhide Gas Plant in Texas December 21–22**

Exterran reported an unspecified unit shut down on low second-state discharge pressure at its Dollarhide plant last Friday after the tubing line to the gauge froze, according to a filing with the Texas Commission on Environmental Quality (TCEQ). Operators had to de-thaw the line and restart the unit four times. On December 22, the plant reported the Cat-11 unit shut down on an RPM Lug malfunction very early that morning, and an unspecified unit shut down twice on high suction scrubber level, according to TCEQ filings.

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177424>

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177435>

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177436>

### **Enbridge Reports AGI Unit Shutdown at Its Tilden Gas Plant in Texas December 21**

Enbridge reported the No. 2 acid gas injector (AGI) unit at its Tilden plant shut down last Friday morning while operators were preparing to conduct repairs on a transmitter, according to a filing with the Texas Commission on Environmental Quality. The unit went down due to a lack of system isolation, the filing said.

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=177423>

## Other News

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Nothing to report.

## International News

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### **Libya's Al-Zuweitina Oil Port Remains Shut for Fourth Day December 27 Due to Protests; Port Exports 60,000–70,000 b/d of Oil**

Protests have forced a major oil port in eastern Libya to shut down its operations for a fourth day, the deputy oil minister said on Wednesday. The Al-Zuweitina oil port receives oil pumped from at least three oil fields in the Libyan desert and is responsible for exporting 60,000 to 70,000 barrels of oil a day. Protesters demanding jobs and health benefits on Saturday entered the terminal and pressured a manager to stop operations. Analysts estimate 20 percent of Libyan oil exports depart from the port.

<http://www.presstv.ir/detail/2012/12/27/280304/libya-protesters-shut-down-oil-terminal/>

[http://www.rigzone.com/news/oil\\_gas/a/123069/Libya\\_Oil\\_Terminal\\_Shut\\_Down\\_by\\_Demonstrators](http://www.rigzone.com/news/oil_gas/a/123069/Libya_Oil_Terminal_Shut_Down_by_Demonstrators)

### **Iraq and Jordan to Build 1 MMb/d Crude Oil Pipeline to the Red Sea to Export Iraqi Oil, Increase Iraqi Natural Gas Exports to Jordan – Jordanian Media Reports**

Officials in Iraq and Jordan on Monday announced they have agreed to speed efforts to build a 1 MMb/d crude oil pipeline across Jordan to the Red Sea port of Aqaba to export Iraqi oil, according to Jordanian media reports. Iraq has also agreed to increase the capacity of a natural gas pipeline to supply Jordan with additional Iraqi gas. Jordan relies on imports for 95 percent of its energy needs. It currently imports 10,000 barrels of Iraqi oil per day and has recently agreed to increase that amount to 15,000 b/d.

<http://www.presstv.com/detail/2012/12/25/280098/iraq-to-extend-oil-pipeline-in-jordan/>

<http://www.sfgate.com/news/world/article/Iraq-s-northern-Kurdish-region-stops-oil-exports-4144699.php>

### **Yemen Army Attacks Tribesmen Blocking Repairs to 110,000 b/d Maarib Crude Oil Pipeline**

<http://www.reuters.com/article/2012/12/23/yemen-military-tribes-idUSL5E8NN0ZF20121223>

## Energy Prices

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U.S. Oil and Gas Prices December 27, 2012			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b> <b>West Texas Intermediate U.S.</b> \$/Barrel	90.71	89.44	99.85
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	3.35	3.25	2.93

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 and 1:00 PM Eastern Time every Wednesday.

***Natural Gas Weekly Update*** from EIA

<http://www.eia.gov/oog/info/ngw/ngupdate.asp>

Updated after 2:00 PM Eastern Time every Thursday.

## ENERGY ASSURANCE DAILY

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

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