



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

# ENERGY ASSURANCE DAILY

Thursday Evening, December 16, 2010

## *Electricity*

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### **Southern Shuts 856 MW Hatch Nuclear Unit 1 in Georgia December 16**

Southern shut the unit to fix a feedwater pump, a company spokeswoman said. The Nuclear Regulatory Commission reported that on the morning of December 15 the unit was operating at 59 percent.

<http://www.bloomberg.com/news/2010-12-16/southern-co-shuts-hatch-1-unit-in-georgia-to-fix-feedwater-pump.html>

Information also derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2010/>

### **Update: Indiana-Michigan Power's 1,000 MW D.C. Cook Nuclear Unit 1 in Michigan at Full Power by December 16**

The unit slipped to 49 percent capacity on December 13 after workers "manually started all Auxiliary Feedwater (AFW) pumps in response to a loss of the Unit 1 East Main Feedwater Pump," the company said in an earlier filing with the Nuclear Regulatory Commission (NRC). The NRC reported that on the morning of December 15 the unit was operating at 65 percent.

Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2010/>

### **Update: Entergy's 1,207 MW Grand Gulf Nuclear Unit 1 in Mississippi at Full Power by December 16**

The Nuclear Regulatory Commission reported that on the morning of December 15 the unit was operating at 80 percent.

Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2010/>

### **Update: DTE's 1,089 MW Fermi Nuclear Unit 2 in Michigan Ramped Up to 75 Percent by December 16**

The Nuclear Regulatory Commission reported that on the morning of December 15 the unit was operating at 60 percent.

Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2010/>

### **Update: Dominion's 871 MW Millstone Nuclear Unit 2 in Connecticut at Full Power by December 16**

Dominion reduced the unit to fix two tube leaks over the weekend, according to an earlier local news source. The Nuclear Regulatory Commission reported that on the morning of December 15 the unit was operating at 82 percent.

<http://www.theday.com/article/20101214/BIZ02/312149923/1044>

Information also derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2010/>

### **Exelon's 850 MW Dresden Nuclear Unit 3 in Illinois Reduced to 85 Percent by December 16**

The Nuclear Regulatory Commission reported that on the morning of December 15 the unit was operating at full power.

Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2010/>

## **Calpine's 376 MW Inland Empire Energy Center Gas-Fired Unit 1 in California Reduced by December 15**

According to the California Independent System Operator, the unit was reduced by about 126 MW.

<http://www.caiso.com/unitstatus/data/unitstatus201005101515.html>

## **Update: State PSC Cites Utilities for Failures to Prevent and Respond to Late-2009, Storm-Induced Power Failure in West Virginia**

Appalachian Power and Allegheny Power did not adequately prepare for or properly respond to extensive power outages during a December 2009 winter storm, the West Virginia Public Service Commission (PSC) said in an order on December 15. Specifically, the PSC said that both utilities had failed to effectively clear trees ahead of the storm, and that Appalachian Power did not sufficiently explain billing abnormalities to its customers in the wake of the storm. The PSC ordered Appalachian Power to repair certain software, improve communications, and produce a plan to alert customers about billing abnormalities following significant power failures.

<http://wvgazette.com/News/201012150816>

## **Duke Energy Customers Set All-Time Record for Winter Power Use in Carolinas December 15**

Duke Energy generated 17,570 MW of electricity for the hour ending at 8 AM on December 15, breaking the previous winter peak –established on January 11, 2010 – of 17,282 MW.

<http://www.duke-energy.com/news/releases/2010121601.asp>

## **Turlock Irrigation District Plans 174 MW Almond 2 Gas-Fired Power Plant in California**

The California Energy Commission approved construction on December 15.

[http://www.energy.ca.gov/releases/2010\\_releases/2010-12-15\\_approval\\_almond2\\_NR.html](http://www.energy.ca.gov/releases/2010_releases/2010-12-15_approval_almond2_NR.html)

## **Kennecott Utah Copper to Convert 175 MW of Coal-Fired Power Capacity to Burn Natural Gas – Revamped Plant Would Produce 275 MW of Power**

Kennecott Utah Copper (KUC) plans to convert a 175 MW portion of its existing coal-fired power plant in Utah to run on natural gas, the company said on December 15. The new gas-fired unit would produce 275 MW of power; KUC expects to complete the project by 2014. The facility is located at the company's existing copper mine in the Salt Lake Valley, Utah.

<http://www.kennecott.com/library/media/KUC%20power%20plant%20proposed%20upgrade%20NR.PDF>

## ***Petroleum***

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### **Update: Berms Inefficient in Response to Deepwater Horizon Spill in U.S. Gulf of Mexico: Presidential Panel**

Sand piles, or berms, were ineffective in capturing oil from the Deepwater Horizon spill in the U.S. Gulf of Mexico, and federal officials approved them despite “overwhelmingly expensive” costs, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling said on December 16. The berms were intended to prevent oil from reaching the Louisiana Coast. Federal officials, however, only approved the berms because in-state political pressure “overwhelmed the analysis,” according to the Commission.

[http://www.oilspillcommission.gov/sites/default/files/documents/The\\_Story\\_of\\_the\\_Louisiana\\_Berms\\_Project.pdf](http://www.oilspillcommission.gov/sites/default/files/documents/The_Story_of_the_Louisiana_Berms_Project.pdf)

DJN, 13:02 December 16, 2010

### **Update: After December 14 Spill, Buckeye Makes Temporary Fixes along 12-Inch Crude Oil Pipeline in Illinois**

Buckeye Partners LP made temporary fixes along its 12-inch crude oil pipeline in Illinois, but the line remained shut due to a December 14 spill, a company spokeswoman said on December 15. Operators shut the line after it spilled an estimated 500 barrels of oil near Romeoville, Illinois. The company was working on a plan to resume operations, as of latest reports. The affected line runs about three miles; it delivers crude oil from the Shell's Lockport Tank Farm to Citgo's Lemont, Illinois refinery. Chevron had recovered about 380 barrels of the spilled oil, as of latest reports.

<http://www.businessweek.com/news/2010-12-15/buckeye-makes-temporary-repairs-on-illinois-oil-line.html>

<http://www.bloomberg.com/news/2010-12-14/buckeye-shuts-12-inch-crude-oil-pipeline-in-illinois-update1-.html>

## **Update: Chevron Receives Federal OK to Remove Crude Oil from Colorado-to-Utah Pipeline – Line Remains Shut after December 1 Spill**

Chevron received federal authorization to remove all of the remaining crude oil from its 10-inch, Colorado-to-Utah pipeline, and the company was expected to begin that process on December 16, according to Bloomberg News and a local news source. The affected pipeline delivers crude oil from Rangely, Colorado to Chevron's refinery in Salt Lake City, Utah. Chevron shut the line after it spilled 500 barrels of crude oil on December 1, according to the company and the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA). It remained down, as of latest reports. The PHMSA issued a Corrective Action Order on December 8, requiring the company to create and carry out plans for fixing safety issues, and preventing the company from restarting the line without a PHMSA-approved plan. The Associated Press described the removal of crude as "part of repair work supervised by the [PHMSA]."

<http://www.fox13now.com/news/local/kstu-chevron-purge-oil-slc-oil-spill,0,7750929.story>

<http://www.bloomberg.com/news/2010-12-16/slc-mayor-s-office-chevron-to-purge-pipeline.html>

<http://af.reuters.com/article/energyOilNews/idAFN0868519620101209>

<http://www.phmsa.dot.gov/portal/site/PHMSA/menuitem.ebdc7a8a7e39f2e55cf2031050248a0c/?vgnextoid=2d03c15952cbc210VgnVCM1000001ecb7898RCRD&vgnextchannel=d248724dd7d6c010VgnVCM10000080e8a8c0RCRD&vgnextfmt=print>

## **Power Failure Leads to Compressor Shutdown at Sunoco's 194,000 b/d Marcus Hook, Pennsylvania Refinery December 14**

A power failure forced shut a wet gas compressor and triggered flaring, state regulators said. The refinery was "back in compliance at time of report," according to a regulatory filing.

<http://www.businessweek.com/news/2010-12-16/sunoco-reports-emissions-at-marcus-hook-refinery.html>

## **Update: Chevron Authorizes Proposed Big Foot Oil-and-Gas Project in Deepwater U.S. Gulf of Mexico December 16**

The Big Foot development is located about 225 miles south of New Orleans, Louisiana. It would be equipped to produce 75,000 b/d of oil and 25 MMcf/d of natural gas. First oil is anticipated in 2014.

[http://www.chevron.com/chevron/pressreleases/article/12162010\\_chevransanctionsbigfootprojectinthedeepwatergulfofmexico.news](http://www.chevron.com/chevron/pressreleases/article/12162010_chevransanctionsbigfootprojectinthedeepwatergulfofmexico.news)

## **U.S. Crude Oil Inventories Plunged 9.9 Million Barrels Last Week, Marking Biggest Drawdown since September 2002: EIA**

Crude oil prices surged 34 cents on the New York Mercantile Exchange (NYMEX) after the Energy Information Administration (EIA) said crude oil inventories dropped to 346 million barrels by the end of last week, or 9.9 million barrels lower than the previous week. The slide marked the biggest one-week drawdown since September 2002.

[http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/weekly\\_petroleum\\_status\\_report/wpsr.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html)

<http://online.wsj.com/article/BT-CO-20101215-712131.html>

<http://www.ft.com/cms/s/0/14ee88fa-087b-11e0-80d9-00144feabdc0.html>

## **Enbridge to Expand 335-Mile Athabasca Pipeline in Alberta to Deliver Approximately 570,000 b/d of Crude Oil**

Enbridge Inc. plans to expand its Athabasca Pipeline in Alberta to deliver approximately 570,000 b/d of crude oil it said on December 16. The company expects to complete the expansion in early 2014. The line delivers crude oil from the Athabasca and Cold Lake regions of Alberta, south to Hardisty, Alberta.

<http://www.enbridge.com/MediaCentre/News.aspx?yearTab=en2010&id=1370169>

## **Update: Apache Expects to Restart Van Gogh Oilfield Offshore Australia in January**

Apache expects to restart its Van Gogh oilfield offshore Australia in January 2011, subject to favorable weather conditions, it said on December 14. The company stopped production at the field for unplanned work by October 19, it said previously. It was not clear how much Van Gogh was producing at the time of the incident, but the field was expected to eventually yield 40,000 b/d.

<http://investor.apachecorp.com/releasedetail.cfm?ReleaseID=536905>

[http://www.rigzone.com/news/article.asp?a\\_id=100346](http://www.rigzone.com/news/article.asp?a_id=100346)

### **Operational Issues Lead Destin Pipeline Company to Declare Force Majeure along 1.2 Bcf/d, 255-Mile Destin Natural Gas Pipeline in Mississippi and U.S. Gulf of Mexico December 15**

Destin declared force majeure due to "operational problems" at the Pascagoula Gas Plant in Mississippi, but the company expected to end the force majeure event within less than four hours, it said in separate online notices. The line connects producers in the U.S. Gulf of Mexico to the processing plant in Pascagoula, Mississippi and to multiple other pipelines

<http://af.reuters.com/article/energyOilNews/idAFN1529370420101215>

<http://www.destin-pipeline.com/eNotice/FinalReview.asp?code=des2010349.11535>

<http://www.destin-pipeline.com/eNotice/FinalReview.asp?code=des2010349.102742>

<http://www.destin-pipeline.com/default.htm>

### **Update: Cabot Oil & Gas, State DEP Finalize Settlement over Claims that Company's Natural Gas Drilling Operations Contaminated Drinking Water Supplies in Pennsylvania**

Cabot Oil & Gas Corporation will pay \$4.1 million, combined, to residents of Dimock Township in Susquehanna County, Pennsylvania whose drinking water supplies were, the state Department of Environmental Protection (DEP) alleges, contaminated by Cabot's natural gas drilling operations, according to a settlement between the DEP and the company. The agreement would also permit Cabot to resume well completion operations in the Dimock/Carter Road area, according to the company. It expects to begin those operations in the first quarter of 2011, with new drilling commencing in the second quarter.

<http://www.portal.state.pa.us/portal/server.pt/community/newsroom/14287?id=15595&typeid=1>

<http://phx.corporate-ir.net/staging/phoenix.zhtml?c=116492&p=irol-newsArticle&ID=1508409&highlight=>

<http://www.reuters.com/article/idUSN1518374720101216>

### **ONEOK Partners Plans 75,000-85,000 b/d Expansion along Existing NGL Gathering Systems in Mid-Continent and Texas**

ONEOK Partners, L.P. plans to add approximately 75,000 to 80,000 b/d of raw, unfractionated NGLs to its existing NGL gathering systems in the Mid-Continent and the Arbuckle Pipeline, the company said on December 15. The projects would be located in the Cana-Woodford Shale and Granite Wash plays in Oklahoma and Texas.

Specifically, the company plans to:

- Construct more than 230 miles of 10- and 12-inch diameter NGL pipelines in a bid to expand its existing Mid-Continent NGL gathering system in the Cana-Woodford and Granite Wash plays. The lines would connect the partnership's current system to three proposed third-party natural gas processing facilities and to three existing natural gas processing facilities that are undergoing expansions.
- Install additional pump stations on the Arbuckle Pipeline to increase its capacity to 240,000 b/d. The Arbuckle Pipeline is a 440-mile NGL pipeline that extends from southern Oklahoma through the Barnett Shale of north Texas and on to the partnership's fractionation and storage facilities at Mont Belvieu on the Texas Gulf Coast.

ONEOK expects to complete the projects during the first half of 2012.

<http://ir.oneok.com/releasedetail.cfm?ReleaseID=537260&ReleaseType=ONEOK%20General>

### EIA Energy Outlook Projects Growing Reliance on Shale Gas, Reduced Energy Import Shares, and Increased Electricity Generation from Renewables and Natural Gas

The U.S. Energy Information Administration released on December 16 its Annual Energy Outlook 2011 (AEO2011) Reference Case, offering updated projections for U.S. energy markets through 2035. Among its key projections:

- The country's technically recoverable unproved shale gas resource has risen to 827 Tcf (as of January 1, 2009), compared to 353 Tcf in the AEO2010 Reference Case. The increase reflects additional information related to more drilling activity in new and existing shale plays. This larger resource leads to about double the shale gas production and over 20 percent higher total lower-48 natural gas production in 2035, with lower natural gas prices, than was projected in the AEO2010 Reference case.
- Projected demand for energy imports is moderated by increased use of domestically produced biofuels, demand reductions resulting from the adoption of efficiency standards, and rising energy prices. Rising fuel prices also spur domestic energy production across all fuels, which moderates growth in energy imports. The net import share of total U.S. energy consumption in 2035 is 18 percent, compared with 24 percent in 2009.
- Coal remains the dominant energy source for electricity generation because of continued reliance on existing coal-fired plants. EIA is not projecting any new central station coal-fired power plants, however, beyond those already under construction or supported by clean coal incentives. The generation share from renewable resources increases from 11 percent in 2009 to 14 percent in 2035 in response to Federal tax credits in the near term and State requirements in the long term. Natural gas also plays a growing role due to lower natural gas prices and relatively low capital construction costs that make it more attractive than coal. The share of generation from natural gas increases from 23 percent in 2009 to 25 percent in 2035.
- U.S. crude oil production increases from 5.4 million barrels per day in 2009 to 6.1 million barrels per day in 2019 and declines slightly from that level through 2035. Production increases come from onshore enhanced oil recovery projects and shale oil plays.
- In the AEO2011 Reference case, U.S. natural gas consumption rises 16 percent from 22.7 trillion cubic feet in 2009 to 26.5 trillion cubic feet in 2035. The total in 2035 is about 1.6 trillion cubic feet higher than in the AEO2010 Reference case (24.9 trillion cubic feet).

<http://www.eia.doe.gov/neic/press/press352.html>

<http://www.eia.gov/forecasts/aeo/>

### As Renewable Energy Companies Tap Existing Rare-Earth Supplies, DOE Official Says United States Should Reopen Domestic Mines

The United States could run short on certain rare-earth materials as renewable energy companies – wind turbine and solar panel manufacturers, among others – burn through existing supplies, according to David Sandalow, the Department of Energy's (DOE) assistant secretary for policy and international affairs. He said the country should reopen its domestic mines to help prevent any shortfall.

<http://www.bloomberg.com/news/2010-12-15/rare-earth-mines-should-be-reopened-to-ensure-steady-supplies-u-s-says.html>

## Energy Prices

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U.S. Oil and Gas Prices December 16, 2010			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b> <b>West Texas Intermediate U.S.</b> \$/Barrel	88.11	88.35	72.95
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	4.22	4.47	5.53

Source: Reuters



**Snow, Ice Knock out Power to 21,000 Appalachian Power Customers in Virginia and Tennessee December 16 – Most Remain in the Dark, as of Latest Reports**

<https://www.appalachianpower.com/outages/details.aspx?stormName=Dec.%2016%20Winter%20Storm%20-%20Southwest%20Virginia%20and%20Tennessee>

**Downed Wire Cuts Electricity to about 10,000 JCP&L Customers for approximately Two Hours in New Jersey December 15**

<http://www.dailyrecord.com/article/20101215/UPDATES01/101215021/-1/UPDATES01/Power-restored-to-10-000-in-Parsippany-area>

**Successful Stuxnet Cyber Attack Could Cause Extensive Damage to U.S. Critical Infrastructure: Congressional Research Service**

<http://www.csmonitor.com/USA/2010/1215/Stuxnet-virus-could-be-altered-to-attack-US-facilities-report-warns>

**Update: California Energy Commission Approves Solar Millennium's Proposed 500 MW Palen Solar Power Project and Rice Solar Energy's Proposed 150 MW Rice Solar Power Project in California December 15**

[http://www.energy.ca.gov/releases/2010\\_releases/2010-12-15\\_Approval\\_palen+rice\\_NR.html](http://www.energy.ca.gov/releases/2010_releases/2010-12-15_Approval_palen+rice_NR.html)

**Xcel Energy, SunEdison Break Ground on Proposed 54 MW Photovoltaic Solar Deployment in New Mexico December 15**

<http://investors.memc.com/phoenix.zhtml?c=106680&p=irol-newsArticle&ID=1508161&highlight=>

**Update: Judge Reverses State Regulators' Rejection of HBPW's Plans to Construct 78 MW Coal-Fired Power Plant in Holland, Michigan December 15 – Judge Directs Agency to Re-Assess Company's Permit Request**

<http://whtc.com/news/articles/2010/dec/16/holland-bpw-wins-court-battle-power-plant-rejection/>

**Update: NRC Says TVA Has Fixed Fire-Safety Problems at 3,391 MW Browns Ferry Nuclear Power Plant in Alabama – Facility Slid to Lower Safety Status in Late 2009**

[http://www.decaturdaily.com/stories/Browns-Ferry-safety-issues-resolved-NRC-says.72526?content\\_source=&category\\_id=&search\\_filter=&event\\_mode=&event\\_ts\\_from=&list\\_type=&order\\_by=&order\\_sort=&content\\_class=&sub\\_type=stories&town\\_id=](http://www.decaturdaily.com/stories/Browns-Ferry-safety-issues-resolved-NRC-says.72526?content_source=&category_id=&search_filter=&event_mode=&event_ts_from=&list_type=&order_by=&order_sort=&content_class=&sub_type=stories&town_id=)

**Texas Electric Power Reserve Margin to Slide to 13.1 Percent in 2013, or Lower than Minimum Target Requirement: ERCOT**

Reuters, 12:51 December 16, 2010

**Update: Shareholders Authorize Koch Pipeline's Plan to Construct 120,000 b/d, 16-Inch Crude Oil Pipeline from Eagle Ford Shale to Corpus Christi, Texas – Line Would Enter Service in 2012, be Expandable to More than 200,000 b/d**

Reuters, 12:57 December 16, 2010

**Korean National Oil Company Plans 5,000 b/d Expansion at Existing 115,000 b/d Come By Chance Refinery in Newfoundland, Canada**

<http://www.cbc.ca/canada/newfoundland-labrador/story/2010/12/16/nl-refinery-output-1216.html>

**Steam Methane Reformer Shuts at Javelina Gas Processing Facility in Texas by December 15 – Unit Expected to Stay Down for Several Days**

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=148488>

## Links

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***This Week in Petroleum*** from the Energy Information Administration (EIA)

<http://tonto.eia.doe.gov/oog/info/twip/twip.asp>

Updated every Wednesday.

***Weekly Petroleum Status Report*** from EIA

[http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/weekly\\_petroleum\\_status\\_report/wpsr.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html)

Updated after 10:30 AM & 1:00 PM EST every Wednesday.

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

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

Updated after 2:00 PM EST every Thursday.

### ENERGY ASSURANCE DAILY

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

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