

# Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

#### **ENERGY ASSURANCE DAILY**

Tuesday Evening, March 01, 2011

#### **Electricity**

### **Update: After February 28 Storms, Companies Restore Power to Most Customers across U.S. Midwest by March 1**

Fewer than 20,000 customers remained without power across multiple U.S. Midwest states on March 1 after storms knocked out power to more than 220,000 customers across the region on February 28, news and company sources reported. The following table lists peak and current outage figures, based on latest available data.

U.S. Midwest Customer Power Outages February 28 – March 1, 2011				
Electric Utility	State	Peak	Latest Reported	
Ameren	MO	43,000	1,425	
AEP	OH	42,245	1,444	
Duke Energy	OH/KY	11,000	47	
Cleveland Utilities	OH	7,465	0	
South Central Power	OH	7,426	2	
The Energy Cooperative	OH	4,914	250	
FirstEnergy	OH	3,679	3000*	
Dayton Power & Light	OH	2,800	5	
EPB	TN	37,000	8,500	
Volunteer Energy Cooperative	TN	5,000	100*	
Louisville Gas & Electric	KY	8,000	52	
Kentucky Power	KY	2,015	489	
Ameren	IL	19,864	245	
Appalachian Power	WV	13,538	379	
Allegheny Power	WV	14,000	82	
TOTAL*		221,946	16,020	

<sup>\*</sup>Estimates based on incomplete data from company websites and/or news sources

Sources:

http://www.cnn.com/2011/US/02/28/us.severe.weather/index.html?hpt=T2

Ameren (Missouri): http://apps.ameren.com/outage/OutageMap.aspx?state=MO,

http://www.ksdk.com/news/article/246477/3/Thousands-without-power-in-Missouri-Illinois

AEP: https://www.aepohio.com/outages/Default.aspx

Duke Energy: http://www.duke-energy.com/ohio/outages/current.asp,

http://www.local12.com/news/local/story/Storms-Knocks-Out-Power-to-

 $\underline{Thous and s/DSHk2TwrTkygGax9M6oTrg.cspx}$ 

Cleveland Utilities: http://www.clevelandbanner.com/view/full\_story/11706032/article-Storms-rip-southern-half-of-

county--Man%E2%80%99s-death-related?instance=latest\_articles

South Central Power: <a href="http://www.southcentralpower.com/ow/ow\_map.aspx?county=0">http://www.southcentralpower.com/ow/ow\_map.aspx?county=0</a>

The Energy Cooperative: http://www.theenergycoop.com/outage.aspx,

http://www.newarkadvocate.com/article/20110228/NEWS01/110228002/1002/Storms-pound-Licking-County-damage-Myrtle-Avenue-homes

FirstEnergy: http://www.firstenergycorp.com/outages/outages.do?state\_code=OH,

http://blog.cleveland.com/metro/2011/02/overnight storm dumps rain on.html

Dayton Power & Light: http://www.dpandl.com/customer-service/outage-center/outage-map/,

http://newstalkradiowhio.com/localnews/2011/02/state-region-get-socked-with-s.html

<sup>\*\*</sup>Total outages only represent electric utilities listed in this table.

EPB: http://www.epb.net/outages/, http://twitter.com/EPB Chattanooga,

http://www.chattanoogan.com/articles/article 195631.asp

Volunteer Energy Cooperative: http://www.clevelandbanner.com/view/full\_story/11706032/article-Storms-rip-

southern-half-of-county--Man%E2%80%99s-death-related?instance=latest articles

Louisville Gas & Electric: http://stormcenter.lge-ku.com/default.html, http://www.fox41.com/story/14152877/jcps-

on-a-two-hour-delay-after-overnight-storms

Kentucky Power: <a href="https://kentuckypower.com/outages/">https://kentuckypower.com/outages/</a>

Ameren (Illinois): <a href="http://apps.ameren.com/outage/OutageMap.aspx?state=IL">http://apps.ameren.com/outage/OutageMap.aspx?state=IL</a>,

http://stlouis.cbslocal.com/2011/02/28/fit-of-mother-nature-tears-trees-power-lines-down/

Appalachian Power: <a href="https://appalachianpower.com/outages/">https://appalachianpower.com/outages/</a>, <a href="https://www.dailymail.com/ap/ApTopStories/201102280661">https://www.dailymail.com/ap/ApTopStories/201102280661</a>

Allegheny Power: http://app.alleghenyenergy.com/outagestatus/OMS Customer State.aspx?Option=State&User=,

http://www.newsandsentinel.com/page/content.detail/id/545059/Stormy-weather.html?nay=5061

## Storms Knock Out Power to More than 33,000 Duke Energy Customers in Carolinas February 28

Some 1,085 customers remained without power, as of latest reports. http://www.salisburypost.com/News/030111-severe-weather-qcd

http://www.duke-energy.com/north-carolina/outages/current.asp

### Substation Snag Forces Offline Multiple Other Substations, Cuts Electricity Briefly to about 25,000 Black Hills Energy Customers in Colorado February 28

Technical issues at a substation forced offline five other substations and knocked out power for almost 15 minutes to approximately 25,000 Black Hills Energy customers in Colorado on February 28, a company spokesman said. http://www.chieftain.com/news/local/outage-hits-thousands/article\_3ce7cac8-43be-11e0-bcf3-001cc4c002e0.html

#### FPL's 512 MW Point Beach Nuclear Unit 2 in Wisconsin Shut by March 1

The Nuclear Regulatory Commission reported that on the morning of February 28 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/2011/

#### AES's 495 MW Alamitos Gas-Fired Unit 6 in California Reduced by February 28

According to the California Independent System Operator, the unit reported an unplanned curtailment of 245 MW by February 28.

http://www.caiso.com/unitstatus/data/unitstatus201102281515.html

#### SCE's 200 MW Eastwood Hydro Unit in California Shut by February 28

According to the California Independent System Operator, the unit reported an unplanned outage by February 28. <a href="http://www.caiso.com/unitstatus/data/unitstatus201102281515.html">http://www.caiso.com/unitstatus/data/unitstatus201102281515.html</a>

#### Update: AEP, FirstEnergy Seek to Withdraw Applications for 765 kV, West Virginia-to-Maryland PATH Transmission Line

American Electric Power (AEP) and FirstEnergy sought yesterday to withdraw their applications in Virginia, Maryland, and West Virginia to construct the 765 kV, 275-mile, Potomac-Appalachian Transmission Highline (PATH) project, citing grid operator PJM Interconnection's conclusion that the project would not be needed until well into the future.

http://www.aep.com/newsroom/newsreleases/?id=1676

### Prairie Wind Transmission Plans 345 kV Transmission Line in Kansas – OGE to Extend Line in Oklahoma

Prairie Wind Transmission, LLC seeks to construct a double circuit 345 kV transmission line from Westar Energy's Wichita 345 kV Substation, about one mile northeast of Colwich, to a new substation just east of Medicine Lodge, Kansas, and then south to the Kansas-Oklahoma border. Oklahoma and Electric (OGE) plans to continue the line from the Kansas-Oklahoma border to its Woodward Substation, about 10 miles south of Woodward, Oklahoma. Prairie Wind Transmission is a joint venture between Westar Energy and Electric Transmission America. http://www.westarenergy.com/corp\_com/corpcomm.nsf/newsreleaselatestweb

### **BOEMRE Okays First Deepwater Drilling Permit since Deepwater Horizon Disaster February 28**

The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) yesterday approved Noble Energy's application to resume drilling at the Santiago prospect in the deepwater Gulf of Mexico, BOEMRE and the company said separately. Noble began drilling the well on April 16, 2010, in 6,500 feet water depth, but suspended activities on June 12, 2010 under the temporary drilling moratorium issued in the wake of the Deepwater Horizon spill. BOEMRE Director Michael R. Bromwich said the agency issued the permit because "the operator successfully demonstrated that it can drill in its deepwater well safety and that it is capable of containing a subsea blowout if it were to occur." Bromwich said the agency expected to approve more deepwater permits in the "coming weeks and months based on the same process that led to the approval of this permit." Noble expects to resume drilling operations in late March 2011, targeting total drilling depth of approximately 19,000 feet. Results are expected by the end of May 2011.

http://www.boemre.gov/ooc/press/2011/press0228.htm http://investors.nobleenergyinc.com/releasedetail.cfm?ReleaseID=553279

### Update: About 800,000 b/d of Oil Production Offline as Unrest Continues in Libya by March 1

Nearly fifty percent (about 800,000 b/d) of Libya's crude oil production was offline by March 1, the country's National Oil Corporation said, as unrest continued throughout the nation. Libya typically produces about 1.6 million b/d of crude. The reduction in output, combined with bad weather, continued to disrupt operations at the nation's ports. At least two ports, however – Melittah and Zawia – had resumed operations and Libya's largest port, Tobruk, was online, Reuters said on March 1. Two Greek tankers also left the nation's El Sider port with about 1.2 million barrels of oil on March 1, according to an official with the company that owns the tankers. Despite that, a vessel carrying Libyan crude was stalled offshore Texas and Louisiana on March 2, unable to offload due to issues surrounding U.S. sanctions, trade sources said.

Reuters, 13:47 March 1, 2011 Reuters, 12:55 March 1, 2011 Reuters, 13:02 March 1, 2011

### Shell to Start up Butadiene Unit at 329,800 b/d Deer Park, Texas Refinery February 28 – March 11

It was not clear when or why the unit shut, based on a filing with state regulators. <a href="http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=151321">http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=151321</a>

#### Valero Restarts HCU at 171,000 b/d McKee, Texas Refinery by March 1

Valero shut the hydrocracking unit (HCU) on February 15 "to replace compressor seals," according to Reuters. Reuters, 10:15 March 1, 2011

### Paulsboro Refining Reduces Unit Rates at 160,000 b/d Paulsboro, New Jersey Refinery by March 11

Paulsboro Refining reduced unit rates as it fixed a small hole in the facility's piping, the company said in a regulatory filing.

Reuters, 00:22 March 1, 2011

### Update: After February 24 Leak, Magellan Restarts 18-Inch, 40-Mile Oil Products Pipeline in Texas March 1

Magellan Midstream Partners finished repairing the line on February 28 and resumed operations at around 12 AM on March 1, a company spokesman said. The line delivers products from Texas City, Texas to Pasadena, Texas. It spilled at least 6,000 barrels of gasoline last week, according to Reuters. Reuters, 09:17 March 1, 2011

### Small Leak Leads Magellan to Shut 10-Inch El Dorado-to-Kansas City Gasoline Pipeline in Kansas February 28 – March 1

Magellan Midstream Partners shut the line after a valve failure on February 28 caused about 20 barrels of oil to spill, a company spokesman said on March 1. The spokesman did not say when the line might resume service. Reuters, 13:39 March 1, 2011

# Update: United States Could Receive Nearly Half of Crude Oil Delivered along Enbridge's Proposed 525,000 b/d, Alberta-to-British Columbia Northern Gateway Pipeline

The United States will likely receive more than one-third – and probably almost half – of the oil delivered along Enbridge's proposed 525,000 b/d, Alberta-to-British Columbia Northern Gateway pipeline, according to documents filed by the company. The company has long-advertised the line as a way to link Canadian producers to customers in Asia. Enbridge, for its part, said it "has always indicated that the U.S. West Coast is a potential market for Canadian crude oil," but that "exports from the oil pipeline will target the Asia-Pacific because of strong demand, proximity to Kitimat and the ability of those markets to process Canadian synthetic and diluted bitumen." <a href="http://www.theglobeandmail.com/report-on-business/most-gateway-pipeline-shipments-slated-for-us/article1924314/">http://www.theglobeandmail.com/report-on-business/most-gateway-pipeline-shipments-slated-for-us/article1924314/</a>

http://www.northerngateway.ca/project-info/northern-gateway-at-a-glance

### Enterprise Products to Convert Newly-Purchased CO2 Pipeline to Deliver 54,000 b/d of Crude Oil from Texas to New Mexico

Enterprise Products Partners L.P. plans to convert its newly-purchased, 8-inch, 39-mile carbon dioxide (CO2) pipeline to deliver about 54,000 b/d of crude oil from Reeves County, Texas to Lea County, New Mexico, the company said on February 28. The converted line would connect producers in the Bone Springs/Avalon Play to the Basin Pipeline. Enterprise plans to build a central delivery point and associated infrastructure for receiving truck deliveries of crude oil and transporting it to the Basin Pipeline. It expects to complete the project by the end of 2011. The company purchased the CO2 pipeline from Trinity Pipeline L.P.

http://phx.corporate-ir.net/phoenix.zhtml?c=80547&p=irol-newsArticle&id=1533778&highlight=

#### Venezuelan Oil Production Slides to Eight-Year Low in 2010; Oil Ministry

Venezuela produced just 2.78 million b/d of crude oil in 2010, the nation's Oil Ministry said on March 1, or the lowest such total since a strike forced shut the nation's oil industry in 2002. Output averaged nearly 3 million b/d in 2009, according to state-run PdVSA. Reuters blamed the decline on inadequate investment in aging fields and maintenance issues, among other factors.

Reuters, 13:54 March 1, 2011

#### Iraqi Oil Exports Rise to Post-Invasion High in February 2011

Iraqi oil exports rose to an average 2.202 million b/d in February 2011, compared to 2.161 million b/d in January 2011, the head of the State Oil Marketing Organization said on March 1. The 2.202 million b/d average marked the highest total since the 2003 invasion. The head of the state organization credited the rise to the resumption of exports from the northern Kurdish region.

 $\underline{http://www.google.com/hostednews/ap/article/ALeqM5gdDqFUOAyZELfmxyy8Qmuo1kVLhw?docId=be892eca3}\\ \underline{ef445a9a87f849d6ac21ec6}$ 

#### Natural Gas

# Leak Leads El Paso's Tennessee Gas to Declare Force Majeure along Natural Gas Pipeline Segment in Ohio March 1

El Paso Corporation's Tennessee Gas Pipeline Company declared force majeure after it discovered a leak along its natural gas pipeline in Gurensey County, Ohio, it said on its website. The company isolated the line but said that the incident had not impacted any customers. The force majeure applied to the line section between Station 209 and MLV 2010.

 $\frac{http://tebb.epenergy.com/ebbmasterpage/Notices/NoticesAutoTable.aspx?code=TGP\&name=Tennessee\%20Gas\%20Pipeline\%20Company\%20-$ 

<u>%20Notice%20Text&status=Notice&sParam1=TGP&sParam2=D&sParam4=136688&sParam9=D&details=Y</u> Reuters, 12:48 March 1, 2011

### U.S. Lower-48 Natural Gas Production Rises to 66.76 Bcf/d in December 2010, or 9.1 Percent Higher than in December 2009: EIA

The lower-48 states produced 66.76 Bcf/d of natural gas in December 2010, compared to 66.60 Bcf/d in November 2010 and 61.18 Bcf/d in December 2009, the U.S. Energy Information Administration (EIA) said on February 28. <a href="http://www.eia.gov/oil\_gas/natural\_gas/data\_publications/eia914/eia914.html">http://www.eia.gov/oil\_gas/natural\_gas/data\_publications/eia914/eia914.html</a> <a href="http://online.wsj.com/article/BT-CO-20110228-711679.html">http://online.wsj.com/article/BT-CO-20110228-711679.html</a>

### Update: After February 19 Explosion, TransCanada Restarts Two of Three Lines along Canadian Mainline Natural Gas Pipeline System in Canada by February 27

TransCanada expected to restart Line 3 of its Canadian Mainline natural gas pipeline system on February 27, the company said, just over a week after an explosion sparked a fire along Line 2. The explosion and fire appeared to have forced shut all three lines, based on an article from Bloomberg News. The company, however, restarted Line 1 on February 20. It was not clear when it planned to restart Line 2, as of latest reports. The system has the capacity to deliver up to 7 Bcf/d of natural gas, but typically transports far less. In 2010, throughput averaged approximately 3.4 Bcf/d.

http://www.bloomberg.com/news/2011-02-27/transcanada-restarts-line-3-accepts-discretionary-shipments-1-.html http://af.reuters.com/article/energyOilNews/idAFN2315889620110223

http://www.nasdaq.com/aspx/stock-market-news-

 $\underline{story.aspx?storyid=201102221533 dowjonesdjonline000361\&title=gas-flow-rates-reduced-on-transcanada-mainline-due-to-explosion}$ 

http://online.wsj.com/article/SB10001424052748703498804576156942433784616.html

### Researchers Question Role of Injection Wells in Spate of Earthquakes across Central Arkansas

Arkansas regulators have ordered an emergency moratorium on new injection wells – used by natural gas drillers to get rid of wastewater – as researchers study whether the wells might be to blame for a recent spate of earthquakes throughout the central part of the state. The Arkansas Geological Survey has already identified "spatial and temporal relationships between the earthquakes and the use of injection wells," according to the New York Times. <a href="http://www.nytimes.com/2011/03/01/us/01earthquakes.html?\_r=2&sq=+"hydraulic fracturing"&st=nyt&adxnnl=1&scp=1&adxnnlx=1299007434-tVfEo9Aqca5GzsmhDMwICQ">http://www.nytimes.com/2011/03/01/us/01earthquakes.html?\_r=2&sq=+"hydraulic fracturing"&st=nyt&adxnnl=1&scp=1&adxnnlx=1299007434-tVfEo9Aqca5GzsmhDMwICQ</a>

#### **Other News**

#### Update: Winds Ease, Valdez Oil Port Reopens in Alaska February 28

Heavy winds forced shut the port on February 26, but operations resumed on February 28, the Associated Press reported. Alyeska Pipeline Service Co.'s 800-mile trans-Alaska crude oil pipeline remained open throughout the disruption. Oil was loaded into storage tanks. Tankers deliver more than 1.5 million barrels of crude oil along the Valdez Arm waterway each day, according to the website of the City of Valdez.

http://abcnews.go.com/Business/wireStory?id=13024431

 $\underline{\text{http://www.bloomberg.com/news/2011-02-28/hurricane-force-winds-shut-alaska-s-valdez-oil-port-ap-says.html} \\ \underline{\text{http://www.ci.valdez.ak.us/port/index.html}}$ 

# **Update:** FutureGen Selects Morgan County as Storage Site for CO2 Capture/Storage Project in Illinois by March 1

http://green.blogs.nytimes.com/2011/03/01/choosing-a-home-for-captured-carbon-dioxide/

#### **Energy Prices**

U.S. Oil and Gas Prices  March 1, 2011				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	98.84	90.25	79.70	
NATURAL GAS Henry Hub \$/Million Btu	3.93	3.84	4.76	

Source: Reuters

#### **Energy Notes**

Storms Knock Out Power to 15,000 Georgia Power Customers in Georgia February 28 <a href="http://wsbradio.com/localnews/2011/02/storms-sweep-through-metro-atl.html">http://wsbradio.com/localnews/2011/02/storms-sweep-through-metro-atl.html</a>

AES to Open 49 MW Mountain View IV Wind Project in Palm Springs, California by End of 2011

http://newsroom.aes.com/phoenix.zhtml?c=202639&p=irol-newsArticle&ID=1534238&highlight=

Algonquin Power & Utilities Corp. Opens 26.4 MW Phase I Red Lily Wind project in Saskatchewan, Canada by February 28

http://www.prnewswire.com/news-releases/algonquin-power--utilities-corp-announces-commercial-operation-of-phase-i-red-lily-wind-project-117097093.html

DTE Energy Seeks to Install up to 12 MW of Solar Power Systems throughout Southeast Michigan over Next Four Years

http://dteenergy.mediaroom.com/index.php?s=43&item=591

Illinois EPA Failed to Appropriately Inspect Four In-State Power Plants: State Auditor General

http://mystateline.com/fulltext-news?nxd\_id=233006

BLM Has Not Consistently Executed its Plans to Manage Idle and Orphan Wells: U.S. GAO

http://www.rigzone.com/news/article.asp?a id=104571

Chukchi and Beaufort Seas in Alaskan Arctic Could Produce nearly 10 Billion Barrels of Oil, 15 Tcf of Natural Gas: Northern Economics, University of Alaska at Anchorage <a href="http://www.ogj.com/index/article-display/8771006411/articles/oil-gas-journal/general-interest-2/20100/february-2011/study-lists\_alaska.html">http://www.ogj.com/index/article-display/8771006411/articles/oil-gas-journal/general-interest-2/20100/february-2011/study-lists\_alaska.html</a>

Economic Conditions, Increased Domestic Oil Production Credited as U.S. Crude/Products Imports Decline nearly 25 Percent from 2005 Peak: Energy Intelligence Briefing <a href="http://www.energyintel.com/#latest">http://www.energyintel.com/#latest</a>

Natural Gas Leak Leads to Local Evacuations in Incline Village, Nevada February 28 <a href="http://www.tahoebonanza.com/article/20110228/NEWS/110229929/1061&ParentProfile=1050">http://www.tahoebonanza.com/article/20110228/NEWS/110229929/1061&ParentProfile=1050</a>

NIPSCO Requests Evacuations after Discovering Natural Gas Leak in Plymouth, Indiana March 1

Restart Leads to Emissions Event at Goldsmith Gas Plant in Texas February 28 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=151355

#### Links

*This Week in Petroleum* from the Energy Information Administration (EIA) <a href="http://tonto.eia.doe.gov/oog/info/twip/twip.asp">http://tonto.eia.doe.gov/oog/info/twip/twip.asp</a> 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 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

Please direct comments and questions to: <a href="mailto:ead@oe.netl.doe.gov">ead@oe.netl.doe.gov</a>