



# ENERGY ASSURANCE DAILY

Monday Evening, February 11, 2013

## Major Developments

### Update: Winter Storm Knocks Out Power to Nearly 668,000 Utility Customers in the U.S. Northeast February 8–9; Nearly 138,000 Customers Remain Without Power February 11

A major winter storm with blizzard conditions slammed the U.S. Northeast Friday and Saturday, dumping 2 to 3 feet or more of snow across New England, and knocking out power to at least 667,763 utility customers across eight states from Maryland to Maine. As of 4:00 p.m. EST Monday, 137,647 customers remained without power in four states. Utilities serving customers in Massachusetts and Rhode Island have been hardest hit. National Grid on Sunday said that it had more than 2,000 crew members blanketing its service area in Massachusetts and Rhode Island, repairing damaged equipment and restoring power to affected customers. It hoped to restore power to most of its remaining affected customers by the end of the day Tuesday. NSTAR reported it was advising customers without power on Sunday to prepare for a multi-day restoration effort. All 3,000 members of its staff were working, and more than 1,000 individual line and tree workers from as far away as Georgia, Illinois, Oklahoma, Wisconsin, and Quebec had been brought in to assist NSTAR customers.

**OE/ISER Situation Reports:** [http://www.oe.netl.doe.gov/named\\_event.aspx?ID=69](http://www.oe.netl.doe.gov/named_event.aspx?ID=69)  
<http://www.bloomberg.com/news/2013-02-11/northeast-digs-out-from-blizzard-as-more-snow-is-forecast.html?cmpid=yhoo>  
[http://www.nationalgridus.com/aboutus/a3-1\\_news2.asp?document=7521](http://www.nationalgridus.com/aboutus/a3-1_news2.asp?document=7521)  
[http://www.nstaronline.com/ss3/nstar\\_news/press\\_releases/2013/blizzard-2-10.pdf](http://www.nstaronline.com/ss3/nstar_news/press_releases/2013/blizzard-2-10.pdf)

U.S. Northeast Customer Power Outages			
February 8–11, 2013			
State/Electric Utility	State	Peak	Latest Reported
Connecticut Light & Power	CT	37,647	5,895
<b>Connecticut Subtotal</b>			<b>5,895</b>
National Grid (MA)	MA	161,233	23,608
NSTAR	MA	241,581	91,307
<b>Massachusetts Subtotal</b>			<b>114,915</b>
Consolidated Edison	NY	2,750	3,272
<b>New York Subtotal</b>			<b>3,272</b>
National Grid (RI)	RI	185,908	13,565
<b>Rhode Island Subtotal</b>			<b>13,565</b>
<b>TOTAL*</b>			<b>137,647</b>

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

Sources:

- <http://outage.cl-p.com/outage/outagemap.aspx>
- [https://s3.amazonaws.com/stormcenter.nationalgridus.com/external/sc\\_ma.html](https://s3.amazonaws.com/stormcenter.nationalgridus.com/external/sc_ma.html)
- <http://outage.nstar.com/outage/outagemap.aspx>
- <http://www.atlanticcityelectric.com/home/emergency/maps/stormcenter/>
- [http://www.pseg.com/home/customer\\_service/outage\\_info/outagemap.jsp](http://www.pseg.com/home/customer_service/outage_info/outagemap.jsp)
- [http://apps.coned.com/stormcenter\\_external/default.html](http://apps.coned.com/stormcenter_external/default.html)
- <http://www.lipower.org/stormcenter/outagemap.html>
- <http://outages.firstenergycorp.com/pa.html>
- <https://www1.nationalgridus.com/PowerOutageMap-RI-RES>

## **Entergy's 653 MW Pilgrim Nuclear Unit 1 in Massachusetts Shuts after Blizzard Conditions Cause a Loss of Offsite Power February 8**

Entergy Nuclear declared an Unusual Event at its Pilgrim Nuclear Station late Friday night after the reactor scrambled due to a loss of offsite power, according to a filing with the U.S. Nuclear Regulatory Commission (NRC). Blizzard conditions in the region were believed to have caused the loss of power. All systems performed as designed, and Emergency Diesel Generators (EDGs) provided power to the safety-related buses. On Sunday morning, Pilgrim operators terminated the Unusual Event and transitioned their focus to recovery. Later that day, the plant again experienced a loss of offsite power. A fault on the 'B' phase of the Startup Transformer occurred due to suspected falling ice striking the phase's insulator. The loss of offsite power de-energized both Reactor Protection System channels, resulting in a reactor scram signal and isolating shutdown cooling mechanisms, which were later returned to service. All other plant systems responded as designed. As of Monday morning the plant remained in cold shutdown and Pilgrim's diesel generators were providing power to the site. Operators were troubleshooting the cause of the interruption.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2013/20130211en.html>

<http://www.nrc.gov/reading-rm/doc-collections/news/2013/13-003.i.pdf>

## ***Electricity***

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### **Southern's 856 MW Hatch Nuclear Unit 1 in Georgia Shut Due to Degrading Reactor Water Chemistry February 10**

Southern Nuclear Operating Company reported that during normal power operations at its Hatch nuclear Unit 1, operators observed condensate/feedwater conductivity begin to increase Sunday morning, according to a filing with the U.S. Nuclear Regulatory Commission. Operators initiated a manual reactor scram due to the elevated reactor water conductivity in accordance with station abnormal operating procedures. All rods inserted completely and no complications were encountered following the scram. Operators were working to isolate the condenser in-leakage. There was no impact on Unit 2.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2013/20130211en.html>

### **TVA's 1,118 MW Browns Ferry Nuclear Unit 3 in Alabama Reduced to 40 Percent by February 11**

On the morning of February 10 the unit was operating at full power.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

### **Progress Energy's 872 MW Brunswick Nuclear Unit 1 in North Carolina Reduced to 70 Percent by February 10**

On the morning of February 9 the unit was operating at full power.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

### **FirstEnergy's 821 MW Beaver Valley Nuclear Unit 1 in Pennsylvania Reduced to 74 Percent by February 9**

On the morning of February 8 the unit was operating at full power.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2013/>

### **AES's 226 MW Huntington Beach Natural Gas-Fired Unit 2 in California Returns to Service by February 10**

The unit returned from an unplanned curtailment of 116 MW that began by February 9.

<http://content.aiso.com/unitstatus/data/unitstatus201302101515.html>

<http://content.aiso.com/unitstatus/data/unitstatus201302091515.html>

### **Watson Cogeneration's 417 MW Watson Natural Gas-Fired Unit in California Reduced by February 9**

The unit entered an unplanned curtailment of 191 MW.

<http://content.aiso.com/unitstatus/data/unitstatus201302091515.html>

## **San Diego Gas & Electric's 575 MW Palomar Natural Gas-Fired Unit in California Reduced by February 9**

The unit entered an unplanned curtailment of 300 MW.

<http://content.caiso.com/unitstatus/data/unitstatus201302091515.html>

## **Update: Calpine's 593 MW Metcalf Natural Gas-Fired Unit in California Returns to Service by February 8**

The unit returned from an unplanned curtailment of 327 MW that began by February 5.

<http://content.caiso.com/unitstatus/data/unitstatus201302081515.html>

## ***Petroleum***

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### **CO-OP Reports Coker Pump House Fire at Its 145,000 b/d Regina, Saskatchewan Refinery February 11**

Federated Co-operatives Ltd. on Sunday reported a fire broke out in a coker pump house at its Regina refinery at 12:30 a.m. local time Sunday and was extinguished 30 minutes later. Operators were still assessing the damage caused by the fire and did not know whether it would have an impact on production.

Reuters, 11:17 February 11, 2013

### **Imperial Restoring Normal Operations at Its 121,000 b/d Sarnia, Ontario Refinery after Unspecified Operational Issue February 8**

Imperial Oil Ltd. said emissions at its Sarnia refinery were due to startup procedures following a recent, unspecified operational issue, according to a recording on a local information line. No impacts to product supply were anticipated, a company spokeswoman said.

Reuters, 13:20 February 8, 2013

### **Amine System Upset Triggers Flaring at Marathon's 490,000 b/d Garyville, Louisiana Refinery February 7**

Marathon Petroleum Corp. reported liquid hydrocarbon got into the amine system at its Garyville refinery Thursday, and in order to minimize further upset in the system operators removed the hydrocarbon by routing it to flare, according to a filing with the U.S. National Response Center.

[http://www.nrc.uscg.mil/reports/rwservlet?standard\\_web+inc\\_seq=1037948](http://www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=1037948)

### **Phillips 66 Reports Flaring at Its 139,000 b/d Wilmington, California Refinery February 7**

Phillips 66 reported a flaring event at its Wilmington refinery Thursday, according to a filing with the California Emergency Management Agency. Operators were investigating the incident, which caused more than 500 pounds of sulfur dioxide to release to the atmosphere.

Reuters, 16:48 February 8, 2013

### **Tesoro Reports 'Major' Unit Startup at Its 166,000 b/d Martinez, California Refinery February 8**

Tesoro Corp. reported flaring was expected during the start up of an unspecified "major" unit at its Martinez refinery on Friday, according to a filing with the Contra Costa Health Services.

Reuters, 17:57 February 8, 2013

## ***Natural Gas***

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### **Enterprise Reports Unspecified Fractionation Unit Shutdowns at Its Mont Belvieu NGL Facility in Texas February 5**

Enterprise Products Partners L.P. reported unspecified fractionation units at its Mont Belvieu natural gas liquids (NGL) facility experienced an unscheduled shutdown February 5, according to a filing with the Texas Commission on Environmental Quality. Emissions associated with the incident continued for 9 hours.

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=179011>

## **Amine System Snags Cause Emissions at Atlas Pipeline's 195 MMcf/d Midkiff Gas Plant in Texas February 4 and February 7**

Atlas Pipeline reported emissions at its Midkiff plant February 4 were due to the failure of an amine circulation pump, which caused concentration fluctuations and high hydrogen sulfide in the residue stream, according to a filing with the Texas Commission on Environmental Quality. On February 7, operators reported high carbon dioxide levels in a Consolidator Cryogenic Skid were causing unstable amine concentrations and spiking hydrates at downstream valves. Operators set up a portable flare at the plant's upstream compressor station to mitigate inlet pressures, and diverted as much gas to the Upton Gas GP Inc.'s Benedum gas plant to alleviate inlet pressures at Midkiff.

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=178936>

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=179042>

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=179043>

## **Update: NJNG Says Damage Due to Hurricane Sandy Less Severe Than Originally Estimated in New Jersey**

New Jersey Natural Gas (NJNG) will spend less money to repair and restore its system damaged by Hurricane Sandy than the company initially estimated. Shortly after the storm, the utility estimated repairs would cost \$40–\$60 million. On Thursday, the company said it now estimates repairs to cost \$30–\$40 million, because damage from the storm has been less severe than originally anticipated. NJNG on November 1 was forced to shut down part of its pipeline system that serves the state's barrier islands, an area severely damaged by Hurricane Sandy's high winds and storm surge. Utility workers re-pressurized or replaced 270 miles of main line, and rebuilt or replaced 51,000 meters that might have been damaged or exposed to flooding, restoring service to 31,714 customers who could be safely reconnected. But some areas, particularly in Toms River's Ortleigh Beach section and Normandy Beach, are still without service. Estimates for restoration will depend on the damage that individual homes sustained.

<http://www.livingstondaily.com/usatoday/article/1902439?odyssey=mod|newswell|text|Frontpage|s>

<http://www.njresources.com/news/releases/2013/njng/020813RestorationUpdate.asp>

## **Update: BP Signs Contract for Second Liquefaction Train at Freeport LNG's Proposed Project to Add 2 Bcf/d Export Capacity at Its Quintana Island LNG Terminal in Texas**

Freeport LNG Expansion, L.P. today announced that it had entered into a binding 20-year Liquefaction Tolling Agreement (LTA) with BP for 4.4 million tons per annum (mtpa), equivalent to the production capacity of the second train of Freeport LNG's proposed natural gas liquefaction and liquefied natural gas (LNG) loading facility on Quintana Island near Freeport, Texas. The project will add liquefaction infrastructure at the existing terminal to provide export capacity of approximately 13.2 mtpa of LNG, which equates to processing approximately 2.0 Bcf/d of pipeline-quality natural gas (feed gas). In July 2012, Freeport LNG executed LTAs with Osaka Gas Co., Ltd. and Chubu Electric Power Co. for a total of 4.4 mtpa. Commencement of construction on the project is subject to regulatory approvals from the U.S. Federal Energy Regulatory Commission and the U.S. Department of Energy, and a final investment decision by Freeport LNG. Pending approval, Freeport hopes to begin construction of the first two trains in the fourth quarter of 2013. The first train is anticipated to commence operations approximately 48 months from start of construction, with the second train in operation six to nine months after the first train. Marketing of the capacity of a planned third train is anticipated to be completed before year end, with financing to be closed and construction to begin on the third train as early as late 2014.

[http://freeportlng.newsrouter.com/news\\_release.asp?intRelease\\_ID=7011&intAcc\\_ID=77](http://freeportlng.newsrouter.com/news_release.asp?intRelease_ID=7011&intAcc_ID=77)

[http://www.freeportlng.com/The\\_Project.asp](http://www.freeportlng.com/The_Project.asp)

## **Update: Apache, Chevron Complete Chevron's Entry Into Kitimat LNG Project in British Columbia**

Apache Corporation today announced that its subsidiary Apache Canada Ltd. has completed the previously disclosed transaction with Chevron Canada Limited to build and operate the Kitimat LNG project and develop natural gas resources at the Liard and Horn River basins in British Columbia, Canada. Chevron Canada and Apache Canada each have become a 50 percent owner of the Kitimat LNG plant, the Pacific Trail Pipelines, and 644,000 gross undeveloped acres in the Horn River and Liard basins. Kitimat LNG, at Bish Cove on the northern British Columbia coast, is currently completing front-end engineering and design, and early site work is under way. Current plans call for two liquefaction trains, each with expected capacity of 5 million tons per annum (about 750 MMcf/d). Kitimat LNG has received all significant environmental approvals and a 20-year export license from the Canadian federal government. The 290-mile (463-km) Pacific Trail Pipelines will provide a direct connection between the Spectra Energy Transmission pipeline system and the Kitimat LNG terminal.

<http://investor.apachecorp.com/releasedetail.cfm?ReleaseID=739349>

## Other News

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Nothing to report.

## International News

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### Shell Declares Force Majeure on Natural Gas Supplies to LNG Terminals in Nigeria

The Shell Petroleum Development Co (SPDC) of Nigeria on Thursday announced a declaration of force majeure had been in effect since February 4 on gas supplies to the country's 22 million ton per annum (mpta) liquefied natural gas (LNG) export terminal due to a suspected gas line leak. SPDC has shut down the Soku and Gbaran-Ubie gas plants while investigations are conducted.

<http://www.engineeringnews.co.za/article/shell-declares-force-majeure-on-nigeria-gas-supplies-2013-02-08>

## Energy Prices

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U.S. Oil and Gas Prices			
February 11, 2013			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b> <b>West Texas Intermediate U.S.</b> \$/Barrel	96.43	96.32	98.38
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	3.26	3.34	2.50

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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