



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

ENERGY ASSURANCE DAILY

Monday Evening, March 05, 2012

Major Developments

Tornadoes, Severe Storms, and Snow Cut Power to over 500,000 Customers throughout U.S. Midwest and Southeast March 2–3; Nearly 70,000 Remain without Power March 5

A series of tornadoes, severe storms, and snow swept through the U.S. Midwest and Southeast on Friday and early Saturday, cutting power to more than 500,000 customers and killing 39 people. Michigan utilities were the hardest hit by the storms, with Consumers Energy and Detroit Edison reporting peak outages of 144,000 and 120,000 customers, respectively. As of latest reports Monday afternoon, utilities were reporting about 68,000 customers remained without power in the affected service areas, including 30,000 Consumers Energy customers. The storms also impacted output at TVA's Sequoyah nuclear generating facility (See story in Electricity section).

U.S. Midwest and Southeast Customer Power Outages			
March 2–5, 2012			
Electric Utility	State	Peak	Latest Reported
Consumers Energy Co.	MI	144,000	30,000
Detroit Edison	MI	120,000	2,000
Great Lakes Energy Coop	MI	56,404	17,400
Cherryland Electric Cooperative	MI	20,000	7,000
Traverse City Light & Power	MI	2,800	50
Indiana Michigan Power (AEP)	MI	500	0
Huntsville Utilities	AL	35,000	0
Alabama Rural Electric Association	AL	8,000	300
Alabama Power	AL	6,900	0
Knoxville Utilities Board	TN	29,200	129
Nashville Electric Service	TN	3,200	16
Chattanooga Electric Power Board	TN	1,400	1400
Kentucky Power (AEP)	KY	14,000	4,450
Duke Energy	KY	8,000	1
Kenergy Corp.	KY	4,100	0
Kentucky Association of Electric Cooperatives	KY	2,605	2,605
Athens Utilities	GA	13,000	0
Georgia Power	GA	9,000	624
Georgia Electric Membership Corp	GA	700	0
Clark County REMC	IN	8,000	1,800
Duke Energy	IN	7,800	73
Indiana Michigan Power (AEP)	IN	1,000	0
Duke Energy	OH	3,000	187
Dayton Power & Light	OH	3,000	2
TOTAL*		501,609	68,037

*Total of peaks is non-concurrent. Total outages only represent electric utilities listed in this table.

Sources:

<http://www.hsvutil.org/report-a-problem/electric-outage/>

http://www.georgiapower.com/storm/home.asp?nav=top_about_storm

<http://www.athens-utilities.com/>

<http://www.hartemc.com/contactExt/pgs/outageGraph.aspx>

<https://www.indianamichiganpower.com/outages/>
<http://apps.iplpower.com/outages/outagemap.aspx>
<http://www.midamericanenergy.com/storm/OutageWatch/MECOutageWatch.aspx>
<https://www-11.westarenergy.com/outagemaps/outagetable.asp>
<http://outage.bgenergy.com/>
<http://www.duke-energy.com/kentucky/outages/current.asp>
<http://www.kenergycorp.com/outageCenter/outageCentral.aspx>
<http://stormcenter.lge-ku.com/default.html>
<https://www.kentuckypower.com/outages/details.aspx?stormName=March 2, 2012 Storm>
http://twitter.com/#!/TVA_Newsroom
<http://www.dteenergy.com/>
<http://www.gtlakes.com/storm-central/>
<http://www.consumersenergy.com/content.aspx?id=1809>
<http://www.xcelenergy.com>
<http://viewoutage.energys.com/ms.aspx>
<http://www.duke-energy.com/ohio/outages.asp>
<http://www.dpandl.com/customer-service/outage-center/check-outage-status/>
http://www.southcentralpower.com/OW/ow_map.aspx?county=0
<http://azimuth.mlgw.org/OutageSummary.php>
<http://www.nespower.com/OutageMap/default.aspx>
http://www.kgis.org/website/kub_outage/mainpage.htm
<https://www.epb.net/outages/>
<http://www.foxbusiness.com/news/2012/03/04/utilities-restore-power-after-tornadoes-leave-about-300000-in-dark/>

Enbridge Shuts 318,000 b/d Line 14/64, Reduces Flow on Other Lines, after Car Collision Causes Oil Leak, Fire March 3; Line 14/64 Expected to Restart March 7–8

Enbridge Inc. shut its 24-inch, 318,000 b/d Line 14/64 early Saturday after a deadly vehicle accident near a pumping station in New Lenox, Illinois caused an oil leak and fire. The company expects the westernmost portion of the pipeline, Line 14, to restart this Wednesday, and the remainder, Line 64, to restart on Thursday, according to a company spokeswoman, who cautioned that the timing was based on initial assessments and was subject to change. Line 14/64, which ships crude from Superior, Wisconsin to refineries in the Chicago area, is part of Enbridge's 2 MMb/d system, comprising several pipelines, that extends to the U.S. Midwest, Midcontinent, and southern Ontario from Alberta. Enbridge also shut Line 6A, which carries 670,000 b/d of crude oil between Superior, Wisconsin and Griffith, Indiana, as a precaution on Saturday but restarted the line several hours later. The Enbridge spokeswoman said the outage will have a large impact on other parts of the system, and the company is reworking schedules to maximize capacity on other lines. The outage has caused Canadian supplies to back up in Alberta, and lines upstream of Superior are expected to slow or shut to ensure storage tanks do not become filled to capacity, the spokeswoman said. Pipelines carrying crude oil to the main system from Western Canada production facilities to the United States also face flow restrictions, including Enbridge's 410,000 b/d Line 2B and its 390,000 b/d Line 3, the company said. In a March 3 filing with the Illinois Emergency Management Agency, the company estimated about 20,000 gallons of oil from the Line 14/64 pipeline were released. Enbridge had only reduced the flow of the product, without stopping the leak entirely, at the time of the filing.

Reuters, 21:31 March 3, 2012

Reuters, 13:53 March 4, 2012

<http://www.chicagobusiness.com/article/20120305/NEWS07/120309934/key-part-of-oil-pipeline-system-shut-after-suburban-vehicle-accident>

<http://www.bloomberg.com/news/2012-03-05/enbridge-shuts-illinois-crude-pipeline-after-fire-oil-prices-may-advance.html>

TVA Reduces Its 1,126 MW Sequoyah Nuclear Unit 2 in Tennessee to 70 Percent by March 3 Due to Storm Damage to Transmission Lines; Raises Output to 82 Percent by March 5

Storm damage to transmission lines in Tennessee on Friday forced the Tennessee Valley Authority (TVA) to reduce output from Unit 2 at the Sequoyah nuclear plant to 70 percent from full power, TVA said. More than 57,000 customers of public power agencies in the TVA service area were without power Friday evening in north Alabama, western Kentucky, and southeast Tennessee, the company said. Severe weather beginning February 28 initially knocked out 11 high-voltage transmission lines in northern Alabama and southeastern Tennessee, including some 500 kV lines. Reports late last week indicated one line had been returned to service and all TVA customer connections had been restored. TVA said its transmission system is stable and it has activated its transmission emergency center to assess damage.

Reuters, 18:25 March 2, 2012

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

Update: Both Units at SCE's 2,150 MW San Onofre Nuclear Power Plant in California Remain Shut for Ongoing Inspection of Steam Generator Issues

Southern California Edison (SCE) reported that it continues to perform testing and inspections of the steam generators at the San Onofre Nuclear Generating Station in California. Operators shut the 1,080 MW Unit 3 on January 31 when sensors detected a steam generator leak. SCE subsequently discovered "unusual" degradation of tubes within the steam generator on Unit 2, which has been shut since January 9 for repairs and maintenance. In its latest report, SCE said initial analysis from the inspections does not indicate any correlation between the leak in Unit 3 and the tube wear in Unit 2, but the utility decided not to restart Unit 2 until it is satisfied that the issue with Unit 3 will not occur in Unit 2.

<http://finance.yahoo.com/news/san-onofre-nuclear-generating-station-003700184.html>

Update: FirstEnergy's 1,235 MW Perry Nuclear Unit 1 in Ohio Restarts March 3, Ramps Up to 37 Percent by March 5

FirstEnergy shut the unit March 1 when three turbine bypass valves opened as a result of an automatic turbine runback signal, according to a filing with the U.S. Nuclear Regulatory Commission.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2012/20120302en.html>

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

Update: PSEG's 1,049 MW Hope Creek Nuclear Unit 1 in New Jersey Restarts, Ramps Up to 18 Percent March 5 after Repairs Water Recirculation Pump

PSEG Nuclear reported it shut the Hope Creek nuclear power plant Sunday morning to repair a water recirculation pump, according to a spokesman. One of the plant's two water recirculation pumps tripped offline Thursday afternoon, prompting operators to cut the reactor's output to 55 percent while they investigated the problem. Operators decided to shut the unit Sunday morning to make repairs to the motor generator circuitry associated with the reactor recirculation pump. The placed the reactor back online early Monday morning and were gradually increasing power output. The U.S. Nuclear Regulatory Commission reported this morning the unit was operating at 18 percent power.

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

http://www.nj.com/sunbeam-news/index.ssf/2012/03/pseg_nuclears_hope_creek_react.html

http://www.nj.com/salem/index.ssf/2012/03/pseg_nuclears_hope_creek_react_3.html

LCRA to Restart 598 MW Fayette Coal-Fired Unit 2 in Texas March 4 after Repairs

The Lower Colorado River Authority (LCRA) reported it had scheduled Unit 2 start-up procedures to begin Sunday following maintenance to repair a bent agitator shaft on the flue gas desulfurization system absorber and to repair an oil leak on the air pre-heater drive gear box, according to a filing with state regulators. The unit start-up phase of the outage is expected to be completed in approximately 19 hours, according to the filing.

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165620>

Dynegy's 510 MW Moss Landing Gas-Fired Unit 1 and 510 MW Moss Landing Gas-Fired Unit 2 in California Shut by March 4

The units entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201203041515.html>

Delta Power's 240 MW Crockett Cogen Gas-Fired Unit in California Returns to Service by March 2

The unit returned from an unplanned outage.

<http://content.aiso.com/unitstatus/data/unitstatus201203021515.html>

Petroleum

Update: BP Restarts 77,000 b/d Oil Gathering Center at Prudhoe Bay Oil Field in Alaska March 1 after Fire

BP Plc reported it began restarting operations at its oil-processing facility in Prudhoe Bay last Thursday and was restoring normal operations Friday, two days after a small fire at the Gathering Center 2 (GC-2) prompted a shutdown, according to a spokesman. The company is investigating the incident and declined to say what impact to production the fire had caused.

Reuters, 14:40 March 2, 2012

Faulty Valve Suspected in Crude Oil Leak at Flint Hills' 210,000 b/d North Pole, Alaska Refinery March 4

Flint Hills Resources on Sunday discovered a crude oil leak at its North Pole refinery in Alaska, according to local reports. The company said the leak of about 1,800 gallons of crude was likely caused by a faulty valve, according to reports.

Reuters, 13:27 March 2, 2012

BP Restarts Tail Gas Unit at Its 405,000 b/d Whiting, Indiana Refinery March 1 after Malfunction

BP Plc restarted a tail gas unit at its Whiting refinery on Thursday following a malfunction, according to a notice the refinery filed on Friday with state and national pollution regulators.

Reuters, 16:39 March 4, 2012

ConocoPhillips Reports Compressor Trip, Flaring at Its 362,000 b/d Wood River, Illinois Refinery March 4

ConocoPhillips reported a compressor trip occurred around 10:36 AM local time Sunday at its joint-venture refinery in Wood River, Illinois, according to a filing with state regulators. A release of unknown material was occurring at the time the filing.

Reuters, 04:00 March 5, 2012

Flint Hills Reports Wet Gas Compressor Trip at Its 288,468 b/d Corpus Christi, Texas Refinery March 4

Flint Hills Resources reported a wet gas compressor tripped at its Corpus Christi refinery Sunday afternoon, causing emissions, according to a filing with the U.S. National Response Center. Operators shut the system to make repairs, according to the filing.

http://www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=1004723

Update: Delek Reports FCCU Regenerator Malfunction, Emissions at Its 60,000 b/d Tyler, Texas Refinery March 2

Delek reported a malfunction at the fluid catalytic cracking unit (FCCU) regenerator led to excess emissions Friday, according to a filing with the Texas Commission on Environmental Quality (TCEQ). Operators were working to correct the issue. The company reported emissions from the FCCU and No. 9 boiler were expected to last from February 22 to March 5, according to another TCEQ filing.

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=165220>

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=165581>

Recurring Pressure Controller Malfunctions Lead to Flaring at Alon's 67,000 b/d Big Springs, Texas Refinery March 1–3

Alon USA reported a malfunctioning pressure controller caused the off-gas from a tower to vent to the flare Thursday, according to a filing with the Texas Commission on Environmental Quality (TCEQ). Operators repaired the pressure controller and restored normal operations within three hours, the filing said. On March 3, Alon reported the off-gas compressor went down due to liquid carryover from the gasoil heater low temperature separator, according to a second TCEQ filing. Operators were working to normalize the water level and restart the compressor at the time of the filing.

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165570>

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165586>

Natural Gas

WestFire Energy Suspends Production at Its Kaybob Natural Gas Plant in Alberta February 27 Due to Mechanical Failure

On February 27, WestFire Energy Ltd. was informed by the third-party operator of the Kaybob KA Gas Plant (KA) that a significant mechanical failure had occurred at the Kaybob facility. As a result of the mechanical failure, sour gas processing capacity at KA has been temporarily suspended to allow necessary repairs and is estimated to resume March 15. This suspension has resulted in WestFire's liquids rich natural gas production at KA being temporarily shut-in until repairs are completed and the KA facility is brought back online. Approximately 2,650 barrels of oil equivalent per day of WestFire's Kaybob production (40 percent liquids) will be shut-in during the 18-day unscheduled KA outage. WestFire is planning to conduct other maintenance operations, originally planned for later in the year, during the unplanned outage.

DJN, 09:10 March 5, 2012

Southern Union Reports Unit Shutdowns at Its 140 MMcf/d Keystone Gas Plant in Texas March 3–4

Southern Union Gas Services reported Unit No. 23 went down Saturday when a suction scrubber line plugged off, causing intermittent flaring, according to a filing with the Texas Commission on Environmental Quality (TCEQ). The company reported an amine recover unit shut down Sunday when a controller on the unit malfunctioned, according to another TCEQ filing.

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165591>

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165593>

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165596>

Exterran Reports Engine Shutdowns at Its 50 MMcf/d Reinecke Gas Plant in Texas March 1–2

Exterran reported two engines went down last Thursday, according to a filing with the Texas Commission on Environmental Quality. Engine 70972 went down on low compressor oil pressure, and Engine 74156 went down on inadequate engine oil pressure, the filing said. Operators restarted Engine 74156 and have plans to replace the water hose. Mechanics repaired a ruptured disk on the lube system of Engine 70972. On Friday, Engine 70972 went down again on low engine oil level. Mechanics changed the lubricator and ruptured disk.

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165567>

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=165589>

Sun River Energy, Inc. to Shift Development Focus from Natural Gas Assets to Oil Assets Due to Low Prices

<http://www.sunriverenergy.com/uploads/SEC%20Filings/Sun%20River%20Energy%20Inc%20Announces%20Shift%20to%20Oil%20Assets.pdf>

Other News

Nothing to report

Iraq Oil Output Exceeds 3 MMb/d for the First Time since 1979 – Iraqi Official

Iraq's oil production has risen above 3 MMb/d for the first time in more than three decades, an official announced on Monday, calling it the highest level of output since 1979. Executives involved in Iraq's oil development projects, however, reported they expect a gradual rise in Iraq's production to average out to 3 MMb/d by the end of this year. Production averages ran at just below 2.7 MMb/d in 2011, according to reports.

<http://www.reuters.com/article/2012/03/05/oil-iraq-idUSL5E8E518I20120305?feedType=RSS&feedName=rbssEnergyNews&rpc=43>

Blast Strikes 24-Inch Syrian Crude Oil Pipeline March 5; Syrian Crude Oil Production Declines amid Continuing Conflict

An explosion struck a 24-inch crude oil pipeline in al-Quriye in the eastern province of Deir Ezzor Monday, local news media reported, citing the Petroleum Ministry. The blast was the latest of at least seven reported attacks targeting pipelines and refineries in Syria since a wave of unrest began a year ago. Syrian crude oil production has declined amid the conflict and economic sanctions impacting oil and gas industries. The International Energy Agency estimated that Syria produced approximately 280,000 b/d of oil in January, down from an average of 330,000 b/d in 2011 and 390,000 b/d in 2010, according to its February monthly oil market report.

<http://www.bloomberg.com/news/2012-03-05/blast-strikes-syrian-oil-pipeline-in-east-jazeera-reports-1-.html>
<http://www.dp-news.com/en/detail.aspx?articleid=113817>

Greek 'Alpha 1' Refueling Tanker Carrying over 2,000 Tonnes of Oil and Diesel Fuel Sinks off Athenian Coast March 5; No Spills Reported

<http://www.reuters.com/article/2012/03/05/greece-ship-idUSL5E8E51XM20120305>

Energy Prices

U.S. Oil and Gas Prices			
March 5, 2012			
	Today	Week Ago	Year Ago
CRUDE OIL			
West Texas Intermediate U.S.	106.86	108.95	104.05
\$/Barrel			
NATURAL GAS			
Henry Hub	2.38	2.60	3.75
\$/Million Btu			

Source: Reuters

Links

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

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

Natural Gas Weekly Update from EIA

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

Updated after 2:00 PM EDT every Thursday.

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