



ENERGY ASSURANCE DAILY

Monday Evening, May 23, 2011

Electricity

Powerful Storms, Hail, and Tornadoes Knock Out Power to More than 230,000 Customers Across the Midwest and Appalachia May 22-23

Severe weather, including thunderstorms, hail, and tornadoes, impacted a wide swath of the Midwest and Appalachia on May 22 and 23, knocking out power to more than 230,000 customers from Oklahoma to Virginia and Minnesota to Missouri. Ameren's service territory in Missouri was the most heavily impacted, with a peak of 68,000 customers without power. Ameren opened its Emergency Operations Center in response to the storm and the resulting outages. At least 116 people died as a violent tornado ripped through southwestern Missouri. Empire District Electric Cooperative, which serves the tornado-impacted area, sustained severe damage to its electric system and reported outages affecting 20,000 customers. Empire expects the outages to be multi-day event. As of Monday afternoon, more than 130,000 customers remained without power in the affected states.

Midwest and Appalachia Customer Power Outages			
May 22-23			
Electric Utility	State	Peak	Latest Reported
Ameren	MO	68,000	56,440
Empire District Electric Coop	MO, OK, KS, AR	20,000	18,000
ComEd	IL	33,000	14,000
Ameren	IL	12,665	10,370
Xcel	MN	26,000	9,000
We Energies	WI	11,000	477
Xcel	WI	6,300	1,400
Tri-County Electric Coop	WI	4,500	16
Consumers Energy	MI	11,000	1,668
Indiana Michigan Power	MI	69	0
Midwest Energy Coop	MI	600	0
Louisville Gas and Electric	KY	11,000	11,000
Northeast Oklahoma Electric Coop	OK	9,500	1,000
AEP Appalachian Power	WV	9,000	2,000
AEP Appalachian Power	VA	8,000	5,525
TOTAL*		230,634	130,896

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

Sources:

Ameren: <http://apps.ameren.com/outage/OutageMap.aspx?state=IL> ,

http://www.stltoday.com/news/local/metro/article_a37f297c-8539-11e0-a049-001a4bcf6878.html

Empire District Electric Coop: <https://www.empiredistrict.com/Default.aspx> ,

<https://www.empiredistrict.com/DocHandler.ashx?id=5185>

http://ozarksfirst.com/fulltext?nxd_id=459817

ComEd: <http://lakeinthehills.patch.com/articles/hundreds-still-without-power-following-storm>

Xcel: <http://www.wxow.com/Global/story.asp?S=14697234>,

<http://www.crookstontimes.com/news/x1303841931/Cleanup-begins-after-deadly-Minneapolis-tornado>,

<http://www.kare11.com/news/article/924100/391/Minneapolis-storm-clearly-a-tornado>, <http://on.fb.me/m82eAp> ,

<http://www.xcelenergy.com/portal/site/xcel>

[en/menuitem.471846b0c2475abf262a71986b108a0c/?vgnnextoid=02b6719a0b3cd210VgnVCM100000b40b98aaRC](http://www.xcelenergy.com/portal/site/xcel/en/menuitem.471846b0c2475abf262a71986b108a0c/?vgnnextoid=02b6719a0b3cd210VgnVCM100000b40b98aaRC)

[RD&vgnnextchannel=e97c6113f220f210VgnVCM100000b40b98aaRCRD&appInstanceName=xcel](http://www.xcelenergy.com/portal/site/xcel/en/menuitem.471846b0c2475abf262a71986b108a0c/?vgnnextchannel=e97c6113f220f210VgnVCM100000b40b98aaRCRD&appInstanceName=xcel)

We Energies: <http://www.jsonline.com/news/wisconsin/122417598.html> ,

<http://www.we-energies.com/outagemapext/>

Consumers Energy:

http://www.mlive.com/news/kalamazoo/index.ssf/2011/05/power_could_get_restored_by_5.html

Indiana Michigan Power: <https://www.indianamichiganpower.com/outages/>

Louisville Gas and Electric: <http://www.wlky.com/r/27987668/detail.html>

Northeast Oklahoma Electric Coop: <http://www.newson6.com/story/14696921/utility-crews-still-working-to-restore-electric-service-to-rural-delaware-county>

AEP Appalachian Power: <http://www.timesnews.net/article.php?id=9032311> ,

<http://twitter.com/#!/appalachianpowe/status/72481535982436352> , <https://www.appalachianpower.com/outages/>

Electricity

Delta Cancels 250 Flights due to Power Outage at Minneapolis-St. Paul International Airport

The power outage began at 8 a.m. on May 21 according to press reports, eventually shutting 80 gates at concourses A, B, C, and D in Terminal 1. As of the morning of May 23, all but two gates were up and running, but moving walkways and temperature controls were still not functioning. Airport officials said it may take weeks to permanently fix the airport's power supply. Only Delta Air Lines and its regional carriers were affected. The cause of the outage is unknown – reports have not indicated that there is any connection between the outage and the storms that affected utility customers this weekend.

http://articles.cnn.com/2011-05-21/us/minneapolis.airport.outage_1_power-outage-delta-passengers-flights?s=PM:US

<http://www.startribune.com/local/122386129.html>

<http://www.bizjournals.com/twincities/news/2011/05/21/power-outage-at-msp-airport-strands.html?s=print>

<http://www.startribune.com/local/122439744.html>

Peak of 38,802 Entergy Customers Lose Power in Texas May 22

It was not clear what caused the outage. As of latest reports, only 7 customers were without power in the company's Texas service area.

<http://entergy-texas.com/outages/tx.aspx>

Exelon's 1,131 MW Byron Nuclear Unit 2 in Illinois Shut May 21-23

The company said that it shut the unit on May 21 to replace a pressure relief valve. However, the Nuclear Regulatory Commission (NRC) reported that on the morning of May 22 the unit was operating at 99 percent. The NRC reported that the unit was shut by May 23.

<http://www.bloomberg.com/news/2011-05-23/u-s-nuclear-output-falls-2-8-as-exelon-shuts-illinois-plant.html?cmpid=yhoo>

Information also derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/>

Exelon's 1,022 MW Clinton Nuclear Unit in Illinois Reduced to 80 Percent by May 22, Ramped Up to 97 Percent by May 23

The Nuclear Regulatory Commission reported that on the morning of May 21 the unit was operating at 97 percent.

Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/>

Exelon's 850 MW Dresden Nuclear Unit 2 in Illinois Reduced to 72 Percent by May 22, Returns to Full Power by May 23

The Nuclear Regulatory Commission reported that on the morning of May 21 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/>

Exelon's 1,111 MW La Salle Nuclear Unit 1 in Illinois Reduced to 78 Percent by May 22, Returns to Full Power by May 23

The Nuclear Regulatory Commission reported that on the morning of May 21 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/>

FPL's 510 MW Point Beach Nuclear Unit 1 in Wisconsin Reduced to 67 Percent by May 22, Returns to Full Power by May 23

The Nuclear Regulatory Commission reported that on the morning of May 21 the unit was operating at 99 percent. Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/>

Update: TVA's 1,155 MW Browns Ferry Nuclear Unit 1 in Alabama Ramped Up to 22 Percent by May 21 despite Leakage Reported on May 20

All three units at the Tennessee Valley Authority (TVA) plant were shut on April 27 after losing outside power due to thunderstorms and tornadoes throughout the U.S. South. TVA used the outage to do additional inspections and repairs on all three units. TVA reported in a filing with the Nuclear Regulatory Commission (NRC) that valve leakage resulted in system leakage during maintenance activities at the unit May 20. All leakage has stopped as of latest reports. The NRC reported that on the morning of May 20 the unit was operating at 1 percent.

http://blog.al.com/breaking/2011/05/tva_to_resume_power_generation.html

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110523en.html>

Information also derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/>

TVA's 1,126 MW Sequoyah Nuclear Unit 2 in Tennessee Shut by May 23

The Nuclear Regulatory Commission reported that on the morning of May 22 the unit was operating at 76 percent. Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/>

TVA's 1,125 MW Watts Bar Nuclear Unit 1 in Tennessee Exits Outage and Ramps Up to 30 Percent by May 22 but Reduced to 8 Percent by May 23

The Nuclear Regulatory Commission reported that on the morning of May 20 the unit was not operating. Information derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/>

Exelon's 1,134 MW Limerick Nuclear Unit 1 in Pennsylvania Reduced to 65 Percent by May 21, Returns to Full Power by May 23

The Nuclear Regulatory Commission reported that on the morning of May 20 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/>

Exelon's 802 MW Three Mile Island Nuclear Unit 1 in Pennsylvania Reduced to 50 Percent by May 21, Returns to Full Power by May 23

The Nuclear Regulatory Commission reported that on the morning of May 20 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/>

Exelon's 1,116 MW Peach Bottom Nuclear Unit 2 in Pennsylvania Reduced to 60 Percent by May 21, Returns Full Power by May 22

The Nuclear Regulatory Commission reported that on the morning of May 20 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/>

Southern's 830 MW Farley Nuclear Unit 1 in Alabama Reduced to 79 Percent by May 21, Ramps Up to 99 Percent by May 22

The Nuclear Regulatory Commission reported that on the morning of May 20 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/>

Entergy's 951 MW Indian Point Nuclear Unit 2 in New York Shut May 20

The company said that it shut the unit to replace three high-voltage bushings on an electrical transformer. The Nuclear Regulatory Commission reported that on the morning of May 20 the unit was operating at full power.
<http://www.bloomberg.com/news/2011-05-23/u-s-nuclear-output-falls-2-8-as-exelon-shuts-illinois-plant.html?cmpid=yhoo>

Information also derived from the NRC Power Reactor Status Reports:

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/>

PSE&G's 1,049 MW Hope Creek Nuclear Unit 1 in New Jersey Reduced to 82 Percent by May 21, Returns to Full Power by May 22

The Nuclear Regulatory Commission reported that on the morning of May 20 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/>

Update: Cabrillo Power's 330 MW Encina Gas-Fired Unit 5 in California Returns to Service by May 20

According to the California Independent System Operator, the unit reported a return from an unplanned outage by May 20.

<http://www.caiso.com/unitstatus/data/unitstatus201105201515.html>

Update: Cabrillo Power's 110 MW Encina Gas-Fired Unit 3 in California Returns to Service by May 21

According to the California Independent System Operator, the unit reported a return from an unplanned outage by May 21.

<http://www.caiso.com/unitstatus/data/unitstatus201105211515.html>

NRG's 831 MW Limestone Coal-Fired Unit 1 in Texas Returns to Service May 23

According to a filing with state regulators, the unit was restarting after a May 21 shutdown due to a "steam seal piping failure."

Reuters, 00:11 May 23, 2011

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154742>

Luminant to Perform Unplanned Maintenance on Electrostatic Precipitator at 765 MW Monticello Coal-Fired Unit 3 in Texas May 22

Reuters, 23:36 May 22, 2011

<http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154693>

Bruce Power Shuts 822 MW Bruce Nuclear Unit 8 in Ontario May 20

Reuters, 12:04 May 23, 2011

RMT Announces Plans to Build Four Wind Power Projects in 2011 Totaling 470 MW for

The company, which made the announcement May 23, said the projects will be built for undisclosed Companies in Hawaii, Indiana, Utah, and Pennsylvania. RMT also said it planned to build eight utility-scale solar photovoltaic projects totaling 55 MW during 2011.

http://www.rmtinc.com/press_windpower_2011.php

Petroleum

Update: Enbridge Restarts 39,400 b/d Norman Wells Oil Pipeline System in Northwest Territories, Canada May 20

The pipeline was shut after a May 10 leak of four barrels near Wrigley, Northwest Territories. It is not known what caused the leak. The pipeline will not resume full operations until Plains All American's 187,000 b/d Rainbow crude pipeline is able to restart.

Reuters, 18:31 May 20, 2011

Reuters, 18:53 May 20, 2011

<http://www.calgaryherald.com/news/Enbridge+restarts+pipeline/4821027/story.html>

Update: Husky Trucking Oil as Plains All American Pipeline Says its 187,000 b/d Rainbow Crude Pipeline in Alberta Could Be Closed for Two More Weeks

Husky Energy reported that it has cut oil and gas production by 17,000 boe/d due to wildfires in Alberta. According to the company, the closure of the Rainbow pipeline as well as power issues at production sites has reduced production. The company is attempting to mitigate the curtailment by trucking 4,500 b/d to a Lloydminster, Saskatchewan heavy oil upgrader and asphalt refinery, as well as 2,000 b/d to processing facilities in Taylor, British Columbia.

<https://research.tdwaterhouse.ca/research/public/Markets/CommoditiesNews?documentKey=1314-N20283370-1>
<http://www.calgaryherald.com/news/Enbridge+restarts+pipeline/4821027/story.html>

Upset Leads to Flaring at ExxonMobil's 238,600 b/d Joliet, Illinois Refinery May 21

The company did not immediately specify the cause of the upset.

Reuters, 12:24 May 23, 2011

<http://www.bloomberg.com/news/2011-05-23/exxon-s-joliet-illinois-oil-refinery-reports-upset-flaring.html>

Update: CVR Energy Restarts Continuous Catalytic Reforming Unit at 115,700 b/d Coffeyville, Kansas Refinery by May 23

The continuous catalytic reforming unit produces gasoline and hydrogen. The unit was shut on May 10 after a flange fire.

<http://www.bloomberg.com/news/2011-05-23/cvr-starts-catalytic-reforming-unit-at-coffeyville-refinery-1.html>

Valero Reports Equipment Failure at 185,003 b/d St. Charles Refinery in Norco, Louisiana May 20

According to a May 21 filing, the failure occurred in the sulfur plant.

Reuters, 22:17 May 22, 2011

<http://www.nasdaq.com/asp/stock-market-news-story.aspx?storyid=201105231123dowjonesdjonline000195&title=valero-restarts-stcharles-refinery-unit>

Natural Gas

Update: DOE Approves Cheniere's Plan to Export 803 Bcf/yr of LNG from Sabine Pass LNG Terminal in Louisiana May 20

Cheniere Energy Partners and the U.S. Department of Energy (DOE) both announced on May 20 that the company's plans to export domestically produced liquefied natural gas (LNG) have been approved. This marks the first time a company has been permitted to export LNG from the contiguous U.S. Operations are expected to commence in 2015.

<http://www.energy.gov/news/10339.htm>

<http://phx.corporate-ir.net/phoenix.zhtml?c=101667&p=irol-newsArticle&ID=1566413&highlight>

<http://www.rdmag.com/News/FeedsAP/2011/05/energy-energy-dept-oks-la-liquid-natural-gas-exports/>

DCP Midstream Reports "Missing" Section of Natural Gas Pipeline Causes Major Leak in Winkler County, Texas May 20

According to a company filing with state regulators, the field operator discovered that a 15-foot section of the pipeline was missing. The field operator has blocked in the leak. The 8-inch pipeline normally delivers 7-8 MMcf/d to the company's Goldsmith gas processing plant in Texas.

<http://www11.tceq.state.tx.us/oce/eeer/index.cfm?fuseaction=main.getDetails&target=154704>

<http://www.bloomberg.com/news/2011-05-20/dcp-midstream-shuts-feeder-pipeline-because-of-missing-section.html>

Other News

Update: USCG Partially Reopens 9 Miles of Mississippi River near Baton Rouge, Louisiana May 23

The U.S. Coast Guard (USCG) initially closed five miles of the river, then expanded the closure to nine miles after four barges broke free from a 20-barge tow May 20. One barge hit a dock, and three sank near the Huey P. Long Bridge. The bridge was briefly shut for inspections. The USCG reopened northbound traffic along the river by May 23, but as of latest reports southbound traffic is still prohibited.

<http://www.wafb.com/story/14698179/officials-reopen-northbound-traffic-on-mississippi-river>

http://www.forbes.com/feeds/ap/2011/05/23/general-food-retailers-amp-wholesalers-us-mississippi-river-flooding_8480892.html

Nuclear Inspectors Require More Training: NRC Inspector General

According to the Nuclear Regulatory Commission's (NRC) inspector general, the NRC needs an agency-wide training program for inspectors who check spent fuel storage sites at U.S. nuclear power plants. Some inspectors currently only walk the perimeter of storage sites.

http://news.yahoo.com/s/nm/20110520/us_nm/us usa nuclear inspectors

Energy Prices

U.S. Oil and Gas Prices			
May 23, 2011			
	Today	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	97.28	97.38	68.06
NATURAL GAS Henry Hub \$/Million Btu	4.27	4.09	4.12

Source: Reuters

Energy Notes

NRC Says it Will Not Certify Westinghouse's AP1000 Nuclear Reactor until Company Resolves Design Deficiencies – Westinghouse Declares Design Is Safe

http://online.wsj.com/article/SB10001424052748704816604576335711835869164.html?mod=googlenews_wsj

<http://westinghousenuclear.mediaroom.com/index.php?s=43&item=267>

Ohio Edison Worker Dies of Electrocution while Doing Service Repairs in Ohio May 21

<http://www.wkyc.com/rss/article/190857/45/FirstEnergy-Saddened-by-electrocution-death-of-employee>

Update: United States Enrichment Corporation Retracts May 15 NRC Notification for Paducah Gaseous Diffusion Plant in Kentucky on May 20

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110523en.html>

ConocoPhillips Shuts Unit to Fix Drain Valve Leak at 247,000 b/d Sweeny, Texas Refinery May 20-21

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154726>

Internal Leak Discovered on Raw Gasoline Product Cooler Exchanger 10E-200 at Flint Hills Resources' Port Arthur Refinery in Texas May 23

Reuters, 00:58 May 23, 2011

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154721>

Waha Gas Plant in Texas Shuts Temporarily Due to Problem with Louis Dreyfus Liquids Line May 22 – Waha Operators Also Report Acid Gas Compressor Shutdown Due to Control Box Short May 22

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154739>

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154748>

XTO Energy's Russell Compressor Station in Texas Shut Due to Loss of Power May 22

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154736>

High Differential Pressure Brings down AGI Units #1 and #2 at Tilden Gas Plant in Texas May 20

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154740>

Two Engines Shut, Restart Due to "Hot" Compressor Valves at Andrews Booster Station in Texas May 21

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154732>

Compressor Shuts, Restarts at Big Lake Gas Plant in Texas from Loss of Power May 21

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154734>

Storm Temporarily Shuts West Credo Booster Station in Texas May 21-22

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154723>

Chevron Shuts Ten CO2 Producing Wells at Mabee Ranch CO2 Plant in Texas after Lightning Causes Power Glitch, Causing Compressors C001 and C002 to Shut May 20-22

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154729>

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154708>

Links

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

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.

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

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