

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

ENERGY ASSURANCE DAILY

Tuesday Evening, May 24, 2011

Major Developments

Severe Spring Storms Knock Out Power to about 367,000 Customers in Ohio, Indiana, Michigan, and Tennessee May 23-24

Severe spring storms brought lightning, high winds, and heavy rain late Monday and early Tuesday, knocking out more than 367,000 customers in Ohio, Indiana, Michigan, and Tennessee. As of Tuesday afternoon, more than 83,000 customers remained without power in the affected service areas. Duke Energy's service territories in Ohio and Indiana were the hardest hit (Duke also reported outages in the two Kentucky counties it serves). Duke said Tuesday that it expected to restore all of its Indiana customers by 8 PM CDT Wednesday. AEP Ohio expected to restore the majority of its customers by midnight Tuesday barring any additional severe weather. Additional storms are forecast to move through Ohio later on Tuesday. The storms hit a day after severe weather knocked out power to more than 238,000 customers in the Midwest and Appalachia May 22-23 (see next story for an update on the previous outage event).

Customer Power Outages May 23-24				
Duke Energy	OH, KY	108,000	19,500	
AEP Ohio	OH	56,600	15,200	
Dayton Power & Light	OH	45,000	1,866	
First Energy Ohio	OH	15,000	9,500	
South Central Power Co.	OH	4,800	1,869	
Frontier Power Co.	OH	860	0	
Duke Energy Indiana	IN	64,000	9,283	
Indianapolis Power & Light	IN	4,700	20	
DTE Energy	MI	40,000	15,000	
Nashville Electric Service	TN	28,000	10,949	
TOTAL*		366,960	83,187	

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

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

http://www.kypost.com/dpps/weather/weather_news/Storms-knock-out-power-across-Tri-State_6375407 Dayton Power & Light: <u>http://www.dpandl.com/customer-service/outage-center/outage-map/</u>

http://www.wdtn.com/dpp/on_your_side/2_news_today/wdtn-storms-cause-some-45,000-power-outages AEP Ohio:

https://www.aepohio.com/outages/details.aspx?stormName=May%2023,%202011,%20Severe%20Weather Frontier Power Co: http://www.timesreporter.com/communities/x31872235/Few-hundred-residents-without-power-Tuesday

FirstEnergy: <u>http://www.firstenergycorp.com/outages/outages.do?state_code=OH</u> http://www.wksu.org/news/story/28435

South Central Power Co: <u>http://www.southcentralpower.com/OW/ow_map.aspx?county=0</u>

http://www2.nbc4i.com/news/2011/may/24/12/storms-knock-out-power-100000-ohio-customers-ar-502028/ IN

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

http://www.tristate-media.com/pdclarion/news/local_news/article_006fe2b4-85aa-11e0-b313-001cc4c03286.html Indianapolis Power & Light: http://apps.iplpower.com/outages/outagemap.aspx

http://www.fox59.com/news/wxin-tornado-storms-possible-tornadoes-cause-damage-in-central-indiana-20110523,0,3308088.story

<u>OH</u>

 MI

 DTE Energy: http://www.dteenergy.com/map/outage.html

 http://www.freep.com/article/20110524/NEWS05/105240421/30-000-lose-power-metro-Detroit-storms?odyssey=mod|newswell|text|FRONTPAGE|s

 TN

 Nashville Electric Service: http://www.nespower.com/outagemap/

 http://www.wbir.com/news/article/170632/2/Nashville-storms-cause-power-outages-damage

Electricity

Update: Midwestern Utilities Continue to Restore Power but Tornado-Ravaged Areas Expect Full Restoration to Take Several Days

Utilities in the Midwest had restored power to the majority of affected customers by the afternoon of May 24 after severe weather, including thunderstorms, hail, and tornadoes, knocked out power to more than 238,000 customers May 22-23. Empire District Electric Company, which serves customers in the tornado-affected area of southwestern Missouri, reported 17,000 customers without power as of 11 AM CDT May 24, up from 13,700 customers reported at 9 PM CDT last night. The increase is attributed to additional customers in the Joplin, MO area reporting loss of service. Empire is working to determine the number of customers in the tornado-affected areas who will not be able to return to service for the foreseeable future due to damage to homes and businesses. Empire continues to anticipate that full restoration will take several days. On May 24, New-Mac Electric Cooperative, which also serves customers in southwestern Missouri, said it had restored power to all but 1,000 of the 4,000 customers affected by the storm. By 11 AM CDT May 24, Ameren reported that it had restored power to all but 12,000 customers in its Missouri service area, down from 72,000 outages at the height of the storm. In Illinois, Ameren reported it had restored all but 1,600 customers. Xcel Energy in Minnesota reported that all but 7,500 of its 26,000 affected customers had been restored by the afternoon of May 24.

Empire District: https://www.empiredistrict.com/DocHandler.ashx?id=5187

https://www.empiredistrict.com/DocHandler.ashx?id=5190

New-Mac: <u>http://www.joplinglobe.com/local/x1934379235/New-Mac-reports-1-000-people-remain-offline</u> Ameren: <u>http://www.ameren.com/sites/aue/OutageCenter/Pages/default.aspx</u> <u>http://www.illinoisoutage.com/go/doc/1787/1096651/</u> Xcel: http://kstp.com/article/stories/s2126104.shtml

Update: TVA's 1,118 MW Browns Ferry Nuclear Unit 2 in Alabama Ramped Up to 9 Percent by May 24

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. The Nuclear Regulatory Commission reported that on the morning of May 23 the unit was not operating.

Reuters, 07:47 May 24, 2011 Information also derived from the NRC Power Reactor Status Reports:

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

Update: TVA's 1,125 MW Watts Bar Nuclear Unit 1 in Tennessee Ramped Up to 53 Percent by May 24

The unit exited an outage and ramped up to 30 percent by May 22, but was then reduced by May 23. The Nuclear Regulatory Commission reported that on the morning of May 23 the unit was operating at 8 percent. Information derived from the NRC Power Reactor Status Reports: http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2011/

Cabrillo Power's 104 MW Encina Gas-Fired Unit 2 in California Shut by May 23

According to the California Independent System Operator, the unit reported an unplanned outage by May 23. http://www.caiso.com/unitstatus/data/unitstatus201105231515.html

Emergency Declared at Progress Energy's Brunswick Nuclear Units 1 and 2 Due to Halon Discharge in Emergency Diesel Generator Building May 23

According to a company filing with the Nuclear Regulatory Commission (NRC), Halon gas was discharged into the basement of the emergency diesel generator building. An initial inspection indicates that there was no fire. One worker inside the building at the time was transported to a hospital. The company then terminated the alert after restoring normal atmosphere conditions in the building. Unit 1 has a capacity of 872 MW and Unit 2 has a capacity of 811 MW.

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110524en.html

Offsite Power Problems Reported at DTE's 1,089 MW Fermi Nuclear Unit 2 in Michigan May 22

According to a company filing with the Nuclear Regulatory Commission (NRC), the Unit 2 Control Room was notified that the "switchyard voltage for both ... offsite power circuits following a generator trip would not be sufficient to sustain operability of the safety-related loads." Emergency diesel generators stayed operable during the degraded voltage condition.

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110524en.html

Oil Spill Reported at OPPD's 478 MW Fort Calhoun Nuclear Unit in Nebraska May 23

According to a company filing with the Nuclear Regulatory Commission (NRC), the Omaha Public Power District (OPPD) notified regulators of an oil leak from the facility's lube oil system. According to the filing, "a quantity of oil spilled into the turbine building basement, and an undetermined amount drained to the turbine building sump which discharges to the Missouri River."

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110524en.html

Update: Dominion Brings 580 MW Bear Garden Combined-Cycle Natural Gas-Fired Power Station into Service in Virginia May 23

Two natural gas combustion turbine units (which can use oil as a backup fuel) each have a capacity of 170 MW. Exhaust from the turbines is used to generate an additional 240 MW from another turbine. http://dom.mediaroom.com/index.php?s=43&item=991

Update: Duke Energy Renewables to Start Construction of 168 MW Ironwood Wind Farm in Kansas in Fall of 2011

Westar Energy will purchase all electricity produced by the facility, located 150 miles west of Wichita, Kansas. The wind farm is expected be in operation by mid-2012.

http://finance.yahoo.com/news/Duke-Energy-Chooses-Siemens-prnews-3992417023.html?x=0&.v=1

SDG&E Files to Purchase about 450 MW of Proposed Peaking Power in California May 23

San Diego Gas & Electric (SDG&E) announced on May 23 that it has filed for regulatory approval for three new power-purchase contracts for a total of about 450 MW of quick-start generation from peaker plants proposed for San Diego County. The proposed plants are as follows:

- Apex Power Group's Pio Pico Energy Center. The project would consist of three natural gas-fired units with a capacity of about 100 MW each. If approved, Pio Pico could enter service by summer of 2014.
- Cogentrix Energy's 100 MW Quail Bruch Generation Project. The project would consist of 11 natural gasfired engines that each generates about 9 MW.
- Wellhead's Escondido Energy Center. The project would involve repowering an existing facility by installing a new 45 MW combustion turbine generator. The new unit would be built at the same site as Wellhead's existing facility in Escondido. The unit is expected to go online in July 2012.

All contracts require approval by state regulators. http://public.sempra.com/newsreleases/viewpr.cfm?PR ID=2607&Co Short Nm=SDGE

Hudson Transmission Partners Begins Construction of 660 MW, HVDC New Jersey-New York Hudson Transmission Project

The project consists of an underground and underwater High Voltage Direct Current (HVDC) cable connecting New Jersey to Manhattan under the Hudson River. An electrical converter station will be built in Ridgefield, New Jersey to convert alternating current (AC) from the PJM Interconnection grid into direct current (DC), and then back to AC. The project is due to be completed in the summer of 2013.

http://www.prnewswire.com/news-releases/hudson-transmission-partners-closes-financing-and-commencesconstruction-of-660-mw-transmission-project-122464703.html

MidAmerican Energy Plans 30 MW Pomeroy IV Wind Project in Pomeroy, Iowa

The project is expected to be complete by October 2011. http://www.mortenson.com/NewsArticle 2011 052311 11NewUSWindProjects.aspx

Brookfield Renewable Power Plans 102 MW Coram Ridge Wind Project in Mojave, California

http://www.mortenson.com/NewsArticle_2011_052311_11NewUSWindProjects.aspx

ACCIONA Energy North America Plans 132 MW Dempsey Ridge Wind Farm in Cheyenne, Oklahoma

http://www.mortenson.com/NewsArticle_2011_052311_11NewUSWindProjects.aspx

Petroleum

Eruption of Volcano in Iceland Halts Flights to Offshore O&G Operations May 24

The Grimsvotn volcano began erupting on May 21, spewing volcanic ash into the atmosphere. The ash has led Statoil and ConocoPhillips have reported canceling helicopter flights to and from oil and gas facilities in the North Sea and Barents Sea. Neither company's production has been affected. Bristow Helicopters, which flies to U.K. oil and gas platforms in the U.K. North Sea, announced that 20 flights have been halted as of May 24, affecting 350 oil workers.

http://www.pennenergy.com/index/petroleum/display/0471349566/articles/pennenergy/petroleum/offshore/2011/05/ volcano-eruption_in.html?cmpid=EnlDailyPetroMay242011 http://www.barentsobserver.com/grimsvotn-halts-flights-to-svalbard-oil-rigs.4924379-16176.html http://online.wsj.com/article/BT-CO-20110524-708821.html

Update: Alon USA Completes Shutdown at 80,000 b/d Krotz Springs, Louisiana Refinery May 24

The company shut the refinery due to supply disruptions caused by high water levels along the Mississippi River. The refinery is expected to restart in June. Reuters, 09:53 May 24, 2011

Traders Report Crude Unit Outage at LyondellBasell's 270,000 b/d Houston, Texas Refinery by May 23

According to traders, the unit was said to have lost steam over the weekend. The company declined to comment. http://www.marketwatch.com/story/lyondell-has-crude-unit-outage-in-houston-2011-05-24

Enbridge's Ozark Oil Pipeline in Missouri Running at Reduced Rates May 23 after Storms Knock out Power to Pump Station

The pipeline itself is not damaged and operators plan to restart it once power is restored. It was not clear how much the pipeline had been reduced. According to the company, throughput for May was expected to be 226,350 b/d. The Ozark pipeline is part of Enbridge's Cushing, Oklahoma-to-Wood River, Illinois Mid-Continent System. http://www.reuters.com/article/2011/05/23/pipeline-operations-ozark-idUSN2319405220110523 http://www.bloomberg.com/news/2011-05-23/enbridge-cuts-ozark-oil-pipeline-throughput-after-storm-1-.html

Catalytic Cracker Unit Furnace Explodes at 310,000 b/d Cardon Refinery in Venezuela May 23

The furnace exploded during the restart process. The facility has been shut May 12 due to power problems. http://af.reuters.com/article/energyOilNews/idAFN2328944720110523

Hovensa Restarts "DD4" Hydrotreater at 350,000 b/d St. Croix, U.S. Virgin Islands Refinery May 19

A fire on February 11 had shut the "Distillate Desulfurizer 4" (DD4) hydrotreater. Reuters, 16:53 May 23, 2011

Update: ExxonMobil Restarts Unspecified Unit at 238,600 b/d Joliet, Illinois Refinery by May 24

The company previously reported a May 21 upset at the refinery. http://www.reuters.com/article/2011/05/23/refinery-operations-exxon-jolietidUSN2317096920110523?feedType=RSS&feedName=rbssEnergyNews

Update: SRU Returns to Service at Valero's 185,000 b/d St. Charles Refinery in Louisiana May 20

The company had reported an equipment failure at the sulfur recovery unit (SRU) earlier in the day. The upset had no material impact on production. The event was not related to local flooding. Reuters, 10:29 May 24, 2011

Alon USA Finds Hydrogen Sulfide Leak while Restarting 66,000 b/d Bakersfield, California Refinery May 24

The leak was discovered during start up procedures. The company evacuated all contractors from the units and is investigating to determine the source of the leak.

http://www.bloomberg.com/news/2011-05-24/alon-discovers-leak-while-starting-up-bakersfield-refinery-1-.html

Update: Chevron Plans to Again Seek Permission to Renovate its 245,271 b/d Richmond, California Refinery May 23

The company announced on May 23 that it will seek permission from Richmond officials to renovate the refinery. The company hopes to improve its ability to process high-sulfur crude oil. The city had originally approved the upgrade in 2008 but a judge halted construction the following year due to environmental concerns. http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/05/23/BUVF1JJVEO.DTL

Harvest Pipeline Announces Plans to Build 140-Mile, 100,000 b/d Crude Oil Pipeline from Eagle Ford Shale to Corpus Christi Ship Channel in Texas May 23

The line could be expanded to 150,000 to 200,000 b/d. Segments of the line would have a diameter of 12 or 16 inches. The line is expected to be operational in early 2012. http://www.downstreamtoday.com/news/article.aspx?a_id=26688

New Iran Sanctions to Include PdVSA: State Department – Will Not Impact Oil Sales to U.S.

Petróleos de Venezuela, S.A. (PdVSA) will not be able to access U.S. government contracts or import/export financing due to new sanctions issued against the company for trading with Iran in contravention of a U.S. ban. However, the new sanctions will not impact the company's sale of oil to the U.S. or the activities of its subsidiaries. The U.S. State Department also announced sanctions against six other smaller oil and shipping companies. Reuters, 10:29 May 24, 2011

http://www.reuters.com/article/2011/05/24/us-iran-usa-sanctions-idUSTRE74N47R20110524

BOEMRE and NOAA Announce Memorandum of Understanding Regarding Offshore Energy Development May 23

The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) and the National Oceanic and Atmospheric Administration (NOAA) plan to increase their coordination and collaboration to ensure environmentally sound offshore energy development.

http://www.boemre.gov/ooc/press/2011/press0523b.htm http://www.noaanews.noaa.gov/stories2011/20110523_BOEMRE-MOU.html

U.S. Gasoline Prices Have Biggest One-Week Drop since December 2008: DOE

According to the U.S. Department of Energy (DOE), the national price for regular, unleaded gasoline dropped 11.1 cents over the past week to \$3.85 per gallon. http://af.reuters.com/article/energyOilNews/idAFN2319523820110523

Pemex Announces Mexican Oil Exports Fell 14 Percent from March to April

Production held steady from March to April, but exports dropped to 1.223 million b/d in April, compared to 1.424 million b/d in March.

Reuters, 15:50 May 23, 2011

Natural Gas

Nothing to report.

Other News

Canadian National Railway's IC Rail Marine Shuts Coal Export Terminal Dock on Mississippi River near New Orleans, Louisiana Due to Flooding May 15

The company declared force majeure on May 15, delaying two coal cargoes bound for the United Kingdom totaling 150,000 short tons. The company hopes to reopen the docks on June 1. http://classic.cnbc.com/id/43156130

https://research.tdwaterhouse.ca/research/public/Markets/NewsArticle/1314-WEN3577-1

Endicott Biofuels and Holly Biofuels Building 30 MMGal/Yr. Biodiesel Refinery in Port Arthur, Texas

The two companies announced on May 24 that they have formed the company Sabine Biofuels LLC to partner on the biorefinery currently under construction in Port Arthur. Holly Biofuels is a subsidiary of Holly Corporation. <u>http://www.prnewswire.com/news-releases/endicott-biofuels-and-holly-corporation-partner-on-a-30mm-gallon-per-year-biorefinery-under-construction-in-port-arthur-texas-122498538.html</u> <u>http://www.ogj.com/index/article-display/7529594766/articles/oil-gas-journal/processing-2/refining/20100/may-2011/holly_endicott_building.html</u>

Energy Prices

U.S. Oil and Gas Prices May 24, 2011				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	98.64	94.79	68.58	
NATURAL GAS Henry Hub \$/Million Btu	4.32	4.21	4.12	

Source: Reuters

Energy Notes

Lightning Ignites Fire at Salt Water and Drip Oil Storage Tank in Kingman Country, Kansas May 19 – Fire Fighters Allow Drip Oil to Burn Out http://articles.kwch.com/2011-05-19/storage-tank 29562808

Construction Worker Ruptures 1-Inch PG&E Natural Gas Line in Foster City, California May 19, Leading to Evacuation of Two Buildings – Company Shuts Gas to Line http://www.smdailyjournal.com/article_preview.php?id=159238&title=Gas%20leak%20evacuates%20business%20 park

Vega Biofuels Planning Bio-coal Manufacturing Plant in Cordele, Georgia

http://www.vegabiofuels.com/ http://www.bizjournals.com/atlanta/news/2011/05/05/vega-biofuels-to-build-bio-coalplant.html?ana=RSS&s=article_search&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+b izj_atlanta+%28Atlanta+Business+Chronicle%29

Three Arrested for Stealing 8,600 Gallons of Gasoline from Calumet Lubricants in Shreveport, Louisiana

http://www.stamfordadvocate.com/default/article/3-arrested-in-theft-of-8-600-gallons-of-gasoline-1388278.php

Three Arrested for Theft of \$15,000-Worth of Copper from Duke Energy Substations in Indiana May 24

http://www.theindychannel.com/news/28005118/detail.html

DOT Will Issue New Safety Rules for U.S. O&G Pipeline Operators in August http://online.wsj.com/article/BT-CO-20110519-717991.html#

Acid Gas Compressor Shuts, Restarts on High Liquid Level at Big Lake Gas Plant in Texas May 23

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154824

DCP Unable to Receive Gas Due to Plant Problems, Leading to Flaring at Multiple Facilities in Texas May 23-24

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154779 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154784 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154801 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154818 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154826 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=154826

Links

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