



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

ENERGY ASSURANCE DAILY

Friday Evening, May 27, 2011

Major Developments

Storms Disrupt Power to about 600,000 Customers in Portions of U.S. South and East May 26-27 -- Power Restored to Most Customers May 27

The National Weather Service issued flash flood warnings for parts of the east coast, as overnight storms moved across the entire U.S. eastern seaboard. At least three people died May 26 in Atlanta, Georgia after trees fell on two vehicles. PPL Electric Utilities reported that the storms damaged seven regional transmission lines in Pennsylvania, interrupting the supply of electricity to local substations feeding 50,000 customers. PPL personnel re-routed power to other facilities in the area until permanent repairs can be made. Rain, wind, and lightning left up to a peak of 602,193 customers in the dark both in the Southeast from Georgia to North Carolina, and in the Northeast from Pennsylvania to New York. Scattered outages were also reported in West Virginia. Despite the high number of customers who lost power in the storms, most had their power restored by May 27. As of latest reports, slightly less than 215,000 customers remain without power.

U.S. East Coast Customer Power Outages			
May 26-27			
Electric Utility	State	Peak	Latest Reported
Georgia Power	GA	216,300	34,000
Georgia EMC	GA	5,300	674
PPL	PA	120,000	54,513
Allegheny Power	PA	25,379	6,831
FirstEnergy**	PA	27,500	27,500
Duke Energy	NC	74,910	18,907
Progress Energy	NC	11,871	11,871
NYSEG	NY	47,687	47,687
National Grid	NY	17,478	4,062
Central Hudson Gas & Electric	NY	13,000	4,015
Duke Energy	SC	28,768	4,213
Jersey Central Power & Light	NJ	14,000	351
TOTAL *		602,193	214,624

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

** FirstEnergy reported a range of predicted customers without power, with 26,500 as the upper limit. FirstEnergy numbers comprise outages reported by Penn Power, Penelec, and Met-Ed in Pennsylvania.

Sources:

<http://www.cnn.com/2011/US/05/27/severe.weather/index.html>

<http://www.ajc.com/news/metro-atlanta-weather-flood-957576.html>

<http://www.weather.gov/>

Georgia Power: <http://twitter.com/#!/GeorgiaPower/status/73910470754582529> ,

<http://twitter.com/#!/GeorgiaPower/status/74163170779992064>

Georgia EMC: <http://www.georgiaemc.com/stormcentral/outagesbyregion.aspx> ,

<http://www.kristv.com/news/severe-weather-kills-3-in-georgia/>

PPL: Reuters, 10:37, May 27, 2011

<https://selfserv.pplelectric.com/EUSelfServ/Outage/OutageMap.aspx> , <http://www.pplelectric.com/Outage+Center/> ,

<http://www.prnewswire.com/news-releases/ppl-electric-utilities-restores-service-to-53000-customers-restoration-effort-to-run-into-the-weekend-122719833.html> ,

<http://stage2.mediaroom.com/pplweb/index.php?s=12270&item=40430>

Allegheny Power: http://app.alleghenyenergy.com/outagestatus/oms_customer_option.aspx ,

https://app.alleghenyenergy.com/outagestatus/Map/AE_MAP1.html ,

http://www.pittsburghlive.com/x/pittsburghtrib/news/pittsburgh/s_739219.html ,
http://www.pittsburghlive.com/x/valleynewsdispatch/s_739241.html
FirstEnergy: http://www.firstenergycorp.com/outages/outages.do?state_code=PA
Duke Energy: <http://www.duke-energy.com/north-carolina/outages/current.asp> , <http://www.duke-energy.com/south-carolina/outages/current.asp> , <http://www.wistv.com/Global/story.asp?S=14738368> ,
<http://www.greenvilleonline.com/article/20110527/NEWS/305270022/Duke-working-to-restore-power-to-1-500-in-Upstate>
NYSEG: <http://www.nyseg.com/Outages/outageinformation.html>
National Grid: <http://www1.nationalgridus.com/niagaramohawk/stormcenter/>
Central Hudson Gas & Electric: <http://stormcentral.cenhud.com/default.aspx> ,
<http://www.recordonline.com/apps/pbcs.dll/article?AID=/20110527/NEWS/110529827/-1/NEWS>
Progress Energy: <https://www.progress-energy.com/app/outagemaps/carolinas.aspx>
Jersey Central Power & Light: http://www.firstenergycorp.com/outages/outages.do?state_code=NJ
 , http://www.lehighvalleylive.com/warren-county/express-times/index.ssf/2011/05/overnight_storms_cause_lingeri.html

Electricity

Update: Most Customers Restored in U.S. Midwest Following Week of Storms May 22-26

Duke Energy reported on May 27 that 12,278 customers were still without power in Indiana. News sources previously indicated that a peak of 40,000 of the company's Indiana customers lost power May 25-26. Empire District Electric Company continued to struggle with an outage of 11,000 customers across the tornado-stricken southwestern part of Missouri on May 27. Other Midwestern utility companies reported only scattered outages totaling fewer than 10,000 customers each. Ameren reported on May 27 that the company has restored power to a total of nearly 133,000 outages in Illinois since the afternoon of May 23.

<http://www.duke-energy.com/indiana/outages/current.asp>
<https://www.empiredistrict.com/Outages/Default.aspx>
<http://www.illinoisoutage.com/go/doc/1787/1099811/>

Substation Problem in Butler County Knocks out Power to 42,300 Penn Power Customers Lose Power in Western Pennsylvania May 24-25

A downed transmission line knocked out a substation near Zelienople, Pennsylvania on May 24, knocking out power to 42,300 Penn Power customers. All customers had their power restored by midday Wednesday.

http://www.timesonline.com/news/state/thousands-without-power-after-w-pa-outage/article_b428c6d9-556c-5d37-8a99-dce7d47524c2.html
http://www.pittsburghlive.com/x/pittsburghtrib/news/pittsburgh/s_738951.html

Startup Power Failure Causes PG&E's 1,150 MW Diablo Canyon Nuclear Unit 1 Emergency Diesel Generators to Start in Standby Mode in California May 26

Emergency Diesel Generators were shut down and returned to their normal at-power standby mode on May 26.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110527en.html>

Reactor Protection System Power System Failure Causes Actuation at Energy Northwest's 1,131 MW Columbia Nuclear Unit in Washington May 26

According to a filing with the Nuclear Regulatory Commission (NRC), inspection of the reactor power system power panel uncovered a cleared fuse resulting from an internal short in the windings. The report indicates "The cause of the internal short was attributed to a random isolated occurrence."

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110527en.html>

Update: Entergy's 951 MW Indian Point Nuclear Unit 2 in New York at Full Power by May 27

The Nuclear Regulatory Commission (NRC) reported that on the morning of May 26 the unit was operating at 63 percent.

Information derived from the NRC Power Reactor Status Reports:

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

PSE&G's 1,092 MW Salem Nuclear Unit 2 in New Jersey Reduced to 90 Percent by May 27

The Nuclear Regulatory Commission (NRC) reported that on the morning of May 26 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: TVA's 1,155 MW Browns Ferry Nuclear Unit 1 in Alabama Ramped Up to 88 Percent by May 27

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. The Nuclear Regulatory Commission (NRC) reported that on the morning of May 26 the unit was operating at 21 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 1,118 MW Browns Ferry Nuclear Unit 2 in Alabama Ramped Up to 86 Percent by May 27

The Nuclear Regulatory Commission (NRC) reported that on the morning of May 26 the unit was operating at 43 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 1,131 MW Byron Nuclear Unit 2 in Illinois Ramped Up to 27 Percent by May 27

The Nuclear Regulatory Commission (NRC) reported that on the morning of May 26 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/>

Potential Flooding Issue Discovered in Intake Structure at OPPD's 478 MW Fort Calhoun Nuclear Plant in Nebraska May 26

The Nuclear Regulatory Commission (NRC) reported that holes in the floor where the screen wash header penetrates the ceiling of the Raw Water Vault "could have impacted the ability of the station's raw pumps to perform their design accident mitigation functions."

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110527en.html>

AES's 227 MW Huntington Beach Generating Station Gas-Fired Unit 4 in California Shut by May 26

According to the California Independent System Operator, the unit reported an unplanned outage on May 26.

<http://www.caiso.com/unitstatus/data/unitstatus201105261515.html>

For an additional electricity outage story, see Petroleum section.

Petroleum

Insulator Problem Knocks Out Power to Entire City of Texas City, Texas May 27 – Three Refineries Impacted

According to the Galveston County Daily News, about 13,500 Texas-New Mexico Power (TNMP) customers were without power from 2 a.m. to 4:25 a.m., when all residential customer power was restored. A broken insulator on a 138 kV line was blamed for the outage. Valero's 214,000 b/d Texas City refinery lost power, including its steam system, and was flaring as operators worked to shut and restart the facility. Marathon's 76,000 b/d and BP's 437,000 b/d Texas City refineries also lost power and have since restarted units at the facilities. BP officials indicate their refinery was minimally impacted by the city-wide power outage.

Reuters, 10:57 May 27, 2011

Reuters, 09:34 May 27, 2011

Reuters, 09:27 May 27, 2011

<http://galvestondailynews.com/story/234002>

<http://www.star-telegram.com/2011/05/27/3108541/power-outages-in-texas-city-insulator.html>

Update: Royal Dutch Shell Announces Ramp Up of Production at Seal and Cliffdale Heavy Oil Projects Due to Opening of Rainbow Pipeline in Alberta, Canada May 26

Shell cut production at the two sites in northern Alberta last week due to wildfires in the region.

Reuters, 17:08 May 26, 2011

Update: 98,000 b/d Catalytic Cracker at Exxon Mobil's 248,000 b/d Joliet, Illinois Refinery to Remain Shut for Seven to 10 More Days

Additional time is needed to repair an air blower on the unit. The company previously reported a May 21 upset at the refinery.

<http://www.bloomberg.com/news/2011-05-27/exxon-joliet-cracker-repairs-said-to-take-7-to-10-more-days.html>

Update: Alon USA's 66,000 b/d Bakersfield, California Refinery to Start Production Week of May 30

A hydrogen sulfide leak was discovered during start up procedures May 24. The company evacuated all contractors from the units and has been investigating the source of the leak. Alon will process gasoil from its refineries located in the Los Angeles area at the Bakersfield facility which has been closed since it was acquired by Alon in 2010.

<http://www.bloomberg.com/news/2011-05-27/alon-says-bakersfield-plant-will-start-production-next-week-1-.html>

Natural Gas

Tornadoes Cause Damage, Shutdown of Devon Energy's 200 MMcf/d Calumet Natural Gas Processing Plant in Oklahoma May 24

The plant was damaged by flying debris last Tuesday. Devon officials indicate it could take several weeks to evaluate the damage and repair the plant.

<http://newsok.com/tornado-damage-idles-devon-energy-plant/article/3571383>

Other News

Update: State DNR Reports Oil and Gas Production Remains Curtailed in Louisiana Due to Previous Mississippi River Levels May 26

According to an updated Louisiana Department of Natural Resources report, the high water levels on the Mississippi River have had the following effects on oil and gas production in Louisiana:

- 167 out of 592 producing wells in the potential inundation area are reported shut-in.
- 3,785 out of a total 19,278 b/d of oil and condensate production in the inundation area (including the Atchafalaya Basin) are reported shut-in.
- 32 out of a total 253 MMcf/d of natural gas production in the inundation area (including the Atchafalaya Basin) are reported shut-in.

On May 24, Entergy reported that the company "continue[s] re-energizing conductors where flood water has receded" in the area.

http://dnr.louisiana.gov/assets/news_releases/shut-in/shutin-report.pdf

<http://stormcenter.entergy.com/archive/2011/05/24/flooding-continues-more-customers-could-be-affected.aspx>

Energy Prices

U.S. Oil and Gas Prices May 27, 2011			
	Today	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	100.50	98.51	74.31
NATURAL GAS Henry Hub \$/Million Btu	4.37	4.10	4.19

Source: Reuters

Energy Notes

About 10,000 Knoxville Utilities Board Customers Lose Power in Tennessee Due to Blown Transformer and Utility Pole Fire May 27 – KUB Reports Just 580 Out Later in the Morning

http://www.kgis.org/website/kub_outage/mainpage.htm

<http://www.wbir.com/news/article/170990/2/Transformer-fire-leaves-hundreds-in-Bearden-without-power>

Collision of Two Tractor-Trailer Rigs Carrying 4,800 Gallons of Gasoline Causes Closure of Interstate 5 in Los Angeles, California on May 26

<http://www.sacbee.com/2011/05/26/3655865/tanker-crash-closes-la-freeway.html>

Upset Results in Emissions at BP's 265,000 b/d Carson Refinery in Los Angeles, California According to California Emergency Management Agency Report May 27

Reuters, 13:14 May 27, 2011

<http://www.bloomberg.com/news/2011-05-26/bp-reports-equipment-upset-at-carson-california-refinery.html>

Differential Pressure Causes Shutdown of AGI Units #1 and #2 at Tilden Gas Plant in Texas May 26

<http://www11.tceq.state.tx.us/oc/eer/index.cfm?fuseaction=main.getDetails&target=154995>

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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