

ENERGY ASSURANCE DAILY

Wednesday Evening, November 2, 2011

Major Developments

Update: Over 1.1 Million Customers in the U.S. Northeast Remain without Power November 2

As of 4:30 PM ET on Wednesday, utility and news reports indicated more than 1.1 million customers remain without power from the Mid-Atlantic to New England due to a snow storm that brought heavy, wet snow over the weekend. The total customer outages are down from roughly 1.6 million customers without power at about the same time yesterday. At least 4.3 million customers have lost power at some point due to the storm. Connecticut Light & Power customers were the hardest hit by the storm, and over half a million remained without power Wednesday afternoon. The utility has stated that its goal is to restore the vast majority of its customers by Sunday, November 6. It has posted restoration estimates for all the cities and towns it serves on its website.

| U.S. East Coast Customer Power Outages October 29 – November 2, 2011 | | | | |
|---|----------|-----------------------|--------------------|--|
| Electric Utility | State | Customers Affected | Latest Reported | |
| Connecticut Light & Power | СТ | 831,000 | 537,117 | |
| Western Massachusetts Electric | MA | 154,000 | 76,658 | |
| NSTAR | MA | 114,000 | 7,200 | |
| Massachusetts Electric (National Grid) | MA | 400,000 | 125,087 | |
| Unitil | MA/NH | 70,000 | 376 | |
| Public Service of New Hampshire | NH | 289,615 | 94,611 | |
| Granite State Electric Co (National Grid) | NH | 15,665 | 102 | |
| New Hampshire Electric Cooperative | NH | 11,500 | 3,975 | |
| Central Maine Power | ME | 145,000 | 0 | |
| Narragansett Electric (National Grid) | RI | 20,000 | 26 | |
| New England Subtotal | | 2,050,780 | 845,152 | |
| Jersey Central Power & Light (FirstEnergy) | NJ | 356,000 | 87,216 | |
| PSE&G | NJ | 500,000 | 50,000 | |
| Orange and Rockland | NJ/NY/PA | 122,438 | 36,581 | |
| Con Edison | NY | 129,000 | 11,254 | |
| NYSEG | NY | 82,000 | 20,914 | |
| LIPA | NY | 23,000 | 10 | |
| Central Hudson Gas & Electric | NY | 156,000 | 10,585 | |
| PPL Electric | PA | 318,000 | 17,878 | |
| PECO | PA | 250,000 | 1,000 | |
| PennPower, Penelec, Met-Ed (FirstEnergy) | PA | 292,000 | 31,698 | |
| Potomac Edison, Mon Power, West Penn Power (Allegheny Power) | MD/PA/WV | 59,000 | 358 | |
| Mid-Atlantic Subtotal | | 2,287,438 | 267,494 | |
| TOTAL* | | 4,338,218 | 1,112,646 | |

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

Sources:

http://outage.cl-p.com/outage/outagemap.aspx

http://nuwnotes1.nu.com/apps/mediarelease/clp-pr.nsf/0/CAE18A8760B6E19F8525793C00425F70?OpenDocument http://www.wmeco.com/outage/outagemap.aspx

http://www.nstaronline.com/business/

| http://www1.nationalgridus.com/masselectric/stormcenter/ |
|--|
| http://twitter.com/#!/Unitil |
| http://outage.psnh.com/outage/outagemap.aspx |
| http://www1.nationalgridus.com/granitestate/stormcenter/ |
| http://www.nhec.com/oms.php |
| http://www1.nationalgridus.com/narragansett/stormcenter/ |
| https://www.firstenergycorp.com/outages/outages.do?state_code=NJ |
| http://www.pseg.com/info/media/news.jsp |
| http://wp1.coned.com/or_stormcenter/default.aspx |
| http://apps.coned.com/weboutageinfo/stormcenter/default.aspx |
| http://www.nyseg.com/Outages/outageinformation.html |
| http://www.lipower.org/stormcenter/outages/township.html |
| http://stormcentral.cenhud.com/default.aspx |
| https://selfserv.pplelectric.com/EUSelfServ/Outage/OutageMap.aspx |
| https://www.peco.com/CUSTOMERSERVICE/OUTAGECENTER/STORMCENTER/Pages/default.aspx |
| https://www.peco.com/CustomerService/OutageCenter/OutageMap/Pages/OutageMap.aspx |
| https://www.firstenergycorp.com/outages/outages.do?state_code=PA |
| http://app.alleghenyenergy.com/outagestatus/OMS_Customer_State.aspx?Option=State&User= |

Electricity

Ammonia Leak Triggers Level 2 Alert at SCE's 1,080 MW San Onofre Nuclear Unit 3 in California November 2; Power Output Not Affected, Alert Lifted Later That Evening

Southern California Edison (SCE) officials sounded a Level 2 alert Tuesday afternoon when operators detected a non-radioactive ammonia leak in the water purification system of Unit 3 at the San Onofre Nuclear Generating Station in southern California. The alert and precautionary evacuation of nearby workers were required because fumes could have prevented access to certain areas of the plant, officials said. A filing with the Nuclear Regulatory Commission (NRC) Tuesday states that while operators secured the leakage the plant remained stable. The leak did not impact the plant's electricity production or its 1,070 MW Unit 2. The filing states that approximately 25 gallons of Ammonium Hydroxide spilled through an overflow vent and were contained in a berm under an ammonia tank outside the Unit 3 turbine building. An investigation indicated that a leaking closed valve between the demineralizer system and the ammonia bulk storage tank may have caused the fluid to overflow, according to the NRC filing. Operators stopped the leak about two hours after it was detected and cleaned up the spill. The alert was lifted shortly after 6:00 PM Pacific Standard Time.

http://www.baltimoresun.com/news/nation-world/ktla-san-onofre-

alarm,0,7196763.story?track=rss&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+baltimo resun%2Fnews%2Fnationworld%2Frss2+%28Nation%2FWorld+News%29 http://www.dailybulletin.com/ci_19241995

Information also derived from the NRC Power Reactor Status Reports: http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20111102en.html

Alberta Utilities Commission Approves 500 kV Heartland Transmission Project in Alberta

The Alberta Utilities Commission reported Tuesday that it has approved a joint proposal from AltaLink Management Ltd and EPCOR Distribution to construct a 500 kV line extending 65 km (39 miles) from south Edmonton to a heavy industrial areas near Fort Saskatchewan. The Heartland Transmission Project is one of four projects Alberta's provincial government identified as critical for meeting future power demands. Reuters, 19:00 November 1, 2011

NRC to Amended ABWR Design Certification Rule for Aircraft Impact; New Rule Certifies South Texas Power's Nuclear Reactor Design

The U.S. Nuclear Regulatory Commission (NRC) has directed its staff to publish a final rule amending the Advanced Boiling Water Reactor (ABWR) design certification to address the effects of the impact of a large commercial aircraft, in accordance with the NRC's 2009 aircraft impact assessment rule. South Texas Power Nuclear Operating Company (STPNOC) submitted an application to amend the ABWR design in June 2009. The rule certifies that STPNOC's option for the ABWR design has appropriately accounted for aircraft impact effects. This means that following such an impact, only minimal operator actions would be necessary to meet two conditions: a) the reactor core remains cooled or the containment remains intact; and b) spent nuclear fuel cooling or spent fuel pool integrity is maintained.

http://pbadupws.nrc.gov/docs/ML1130/ML11305A106.pdf

Petroleum

Magellan Midstream to Expand Houston-Area Crude Oil Pipeline Distribution System from the Eagle Ford Shale Production Area to Local Refineries in Texas

Magellan Midstream Partners, L.P. announced yesterday that it is further expanding its crude oil pipeline distribution capabilities in the Houston area to deliver domestic crude oil and condensate transported via third-party pipeline systems from the Eagle Ford Shale production area directly to local refineries. The project includes the construction of a 6-mile, 24-inch crude oil pipeline between the pipeline interchanges of Genoa Junction and Speed Junction, which will connect to the 24-inch crude oil pipeline along the Houston Ship Channel that was previously announced as part of the partnership's Houston-to-El Paso pipeline reversal project, allowing Magellan to further distribute product to the Houston-area refineries. Magellan Midstream expects the project to be operational by the end of 2012.

http://www.magellanlp.com/magellannews.aspx?id=2147483654

Power Blip Briefly Impacts Operations at Shell's 329,800 b/d Deer Park, Texas Refinery November 2

Reuters, 11:55 November 2, 2011

Power Blip Briefly Impacts Operations at ExxonMobil's 344,500 b/d Beaumont, Texas Refinery November 2

Reuters, 11:55 November 2, 2011

Enterprise Reports Eagle Ford Shale Play in Texas Producing 200,000–250,000 b/d, Expects 750,000–850,000 b/d over Long Term

Reuters, 10:10 November 2, 2011

Update: Shell Lifts Force Majeure on Most Contracts at 500,000 b/d Singapore Refinery October 31

Royal Dutch Shell Plc has lifted force majeure on the majority of its supply contracts and will work to restore the remaining contracts, an official said Monday. A massive fire in late September caused extensive damage and forced Shell to shut the entire plant. The company has been slowly restarting units at the plant since then. Both Shell and government investigations into the cause of the fire are still proceeding, according to the official. http://www.downstreamtoday.com/news/article.aspx?a_id=28416

Natural Gas

Copano Processing Shuts No. 2 Fractionation Plant to Resolve Refrigeration Unit Startup Problems at Its 700 MMcf/d Houston Central Gas Plant October 31

Operators reported that during the startup of refrigeration units for the No. 2 fractionation plant, the units would go down every once in a while, leading to flaring. Operators were working to get the refrigerator units to stay on, but eventually decided to just shut the No. 2 fractionation plant until the problem could be resolved. http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=161198

Valve Problems at Targa Resources's Gas Processing Plant Leads to Flaring at XTO Energy's Russell Compressor Station in Texas November 1–4

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=161242

Occidental Permian Shuts Inlet Gas Compressor to Change Bad Valves, Leads to Flaring at Its 80 MMcf/d Wasson CO2 Removal Plant in Texas October 31

Operators depressurized the cylinders and locked out the compressor to replace the valves. <u>http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=161237</u>

Devon Energy Flares Curtailed Gas Production while DCP Midstream Repairs Gas Gathering Pipeline at Its 70 MMcf/d Fullerton Plant in Texas November 1–11

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=161250 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=161252

Power Blip Shuts Multiple Compressors at L&H Compressor Station, Leads to Flaring at Waddell Compressor Station in Texas October 31

An electrical power failure shut the gas cooling fans at the L&H Compressor Station, causing multiple compressors to shut down on high temperature, which resulted in flaring at the Waddell Compressor Station, according to a filing with state regulators Monday. Electrical maintenance personnel restored power at the Compressor Station, and operators put all compressors back on line to cease flaring.

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=161192

Enterprise Reports Small Pipeline Crack, Hydrocarbon Leak at Mont Belvieu NGL **Complex in Texas October 31–November 1**

A contractor identified a hydrocarbon leak from under insulation on the pentane stripper B tower reboiler vapor return piping. After removing the insulation, Enterprise discovered a small crack in a pipeline weld. Operators are reducing pressure to allow for repairs and will purge excess hydrocarbon to flare. http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=161240

Other News

Nothing to report

Energy Prices

| U.S. Oil and Gas Prices November 2, 2011 | | | | | |
|---|-------|----------|----------|--|--|
| | Today | Week Ago | Year Ago | | |
| CRUDE OIL | | | | | |
| West Texas Intermediate U.S. \$/Barrel | 93.01 | 91.45 | 84.01 | | |
| NATURAL GAS | | | | | |
| Henry Hub | 3.49 | 3.62 | 3.42 | | |
| \$/Million Btu Source: Reuters | | | | | |

Energy Notes

Overnight Power Outage Affects 16,000 PG&E Customers in Sacramento, California **Region October 28–29: Power Crews Continue to Investigate Unknown Cause** http://www.sacbee.com/2011/10/30/4017143/mystery-power-outage-hits-16000.html

Snowstorm Cuts Power to 25 Percent of Emergency Sirens at Exelon's Limerick, Pennsylvania Nuclear Generating Station; NRC Defines as a Major Loss of Emergency **Preparedness Capabilities**

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20111031en.html

Blue Castle Holdings Discusses Proposed 3,000 MW Nuclear Power Plant near Green River, Utah with NRC as Part of the Early Site Permitting Process October 27

http://www.bluecastleproject.com/files/news_items/96-102711%20NRC%20Holds%20Hearings%20On%20Utahs%20Proposed%20Nuclear%20Power%20Plant.pdf

Japan's Atomic Energy Commission Estimates It Will Take 30 Years to Safely Close Fukushima Dai-ichi Nuclear Power Plant

http://www.google.com/hostednews/ap/article/ALeqM5hZS3L5T9UFT8xNWiSjo_wJvjfmA?docId=3aefd7c95acc4905b99be4f0a074ed45

Links

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

ENERGY ASSURANCE DAILY

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

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