### **ENERGY ASSURANCE DAILY**

Monday Evening, August 22, 2011

### Major Developments

# Hurricane Irene Batters Puerto Rico and U.S. Virgin Islands, Leaving Hundreds of Thousands without Power August 21-22

Tropical Storm Irene grew to hurricane strength early August 22 after pummeling Puerto Rico overnight. Irene flooded streets, toppled trees, and caused flooding across the island. News reports indicate that over 800,000 Puerto Rico Electric Power Authority (PREPA) customers lost power. Irene also passed through the U.S. Virgin Islands, leaving at least half of St. Croix without power; no exact outage numbers were available. Hovensa's 500,000 b/d St. Croix refinery remained operational throughout the storm, but the refinery's port was shut by the U.S. Coast Guard (USCG) due to hazardous conditions. USCG planned to reopen the port later today. As of this morning, the center of the hurricane was moving west-northwest (towards the U.S.) at the rate of 14 miles per hour. Reuters, 11:25 August 22, 2011

http://channel6newsonline.com/2011/08/more-than-800000-without-power-as-hurricane-irene-slams-puerto-rico/http://www.globalpost.com/dispatch/news/regions/americas/united-states/110822/hurricane-irene-haiti-florida-puerto-rico

http://www.cbsnews.com/stories/2011/08/22/ap/business/main20095375.shtml

 $\frac{http://www.thestar.com/news/world/article/1043026--hurricane-irene-could-hit-bahamas-as-a-category-3-storm-by-thursday}{}$ 

### **Electricity**

### Storms Knock Out Power to Over 116,000 Customers in Maryland August 19-22

Baltimore Gas and Electric (BGE) reports that it has restored power to over 100,000 Maryland customers since storms began to roll through the state on Friday. Pepco reported an additional peak of 16,239 Maryland customers without power on August 20. As of latest reports, 306 BGE customers remain without power, and all restorations resulting from storms of August 21 are complete. Pepco is currently reporting 2,175 Maryland customers in the dark.

http://www.baltimoresun.com/news/maryland/bs-md-power-outages-20110822,0,7719573.story http://www.bge.com/customerservice/stormsoutages/currentoutages/Pages/default.aspx http://www.pepco.com/home/emergency/maps/stormcenter/

#### Storms Cut Power to More than 100,000 Michigan Customers August 20-22

According to reports, over 60,000 DTE Energy customers and about 42,000 Consumers Energy customers lost power across the state at the height of the storm. As of latest reports, fewer than 6,000 DTE Energy customers and just seven Consumers Energy customers were still in the dark.

 $\frac{\text{http://www.freep.com/article/20110822/NEWS05/110822008/About-8-000-still-without-power-following-Saturday-s-storm?odyssey=tab|topnews|text|FRONTPAGE}{\text{topnews|text|FRONTPAGE}}$ 

https://twitter.com/#!/DTE Energy/status/105680889224241152

### Two Storms Knock Out Power to Peak of 34,000 Kansas City BPU Customers in Kansas Last Week

An initial storm early last week knocked out power to a peak of 10,000 Kansas City Board of Public Utilities (BPU) customers. After restoring power to all but 3,000 customers, a second storm hit the area, leaving a peak of 34,000 customers without electric service. As of August 21, just 38 outages were reported in Wyandotte County, Kansas. <a href="http://kansascitykansan.com/blogs/nick-sloan/severe-weather-caused-havoc-bpu-workers-customers/10879">http://kansascitykansan.com/blogs/nick-sloan/severe-weather-caused-havoc-bpu-workers-customers/10879</a>

#### Exelon's 1,111 MW La Salle Nuclear Unit 2 in Illinois Reduced to 85 Percent by August 22

The Nuclear Regulatory Commission reported that on the morning of August 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/

### APS's 1,247 MW Palo Verde Nuclear Unit 3 in Arizona Reduced to 11 Percent by August 22

The Nuclear Regulatory Commission reported that on the morning of August 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/

# Update: TVA's 1,125 MW Sequoyah Nuclear Unit 1 in Tennessee Ramped Up to 98 Percent by August 22

The unit 1 reactor tripped offline due to reactor coolant bus undervoltage on August 18. The Nuclear Regulatory Commission reported that on the morning of August 20 the unit was not operating.

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110822en.html

Information also derived from the NRC Power Reactor Status Reports:

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

# Entergy's 979 MW Indian Point Nuclear Unit 3 in New York Reduced to 70 Percent by August 20, at Full Power by August 21

According to a filing with the Nuclear Regulatory Commission (NRC), the unit lost normal offsite power during a thunderstorm August 19. News reports indicated that lightning knocked out one of three sources of outside power to the plant for about one hour. The NRC reported that on the morning of August 19 the unit was operating at full power.

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110822en.html

http://www.nj.com/newsflash/index.ssf/story/lightning-forces-power-cut-at-indian-point-

plant/a4d7cb737f7c4eb3a0cb487ee169f7a1

Information also derived from the NRC Power Reactor Status Reports:

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

#### PPL's 1,111 MW Susquehanna Nuclear Unit 2 in Pennsylvania Shut August 19

According to a filing with the Nuclear Regulatory Commission (NRC), the unit's main turbine tripped during testing when "a single channel high reactor water level signal was inserted, which was unexpected. Actual water level was within the normal band when the main turbine tripped." The trip led to a reactor scram. The NRC reported that on the morning of August 19 the unit was operating at full power. Unit 1 was not affected.

http://stage2.mediaroom.com/pplweb/index.php?s=12270&item=52186

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110822en.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 1,118 MW Browns Ferry Nuclear Unit 2 in Alabama at Full Power by August 20

The Nuclear Regulatory Commission reported that on the morning of August 19 the unit was operating at 65 percent.

Information derived from the NRC Power Reactor Status Reports:

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

#### FPL's 839 MW Saint Lucie Nuclear Unit 2 in Florida at Full Power by August 21

The Nuclear Regulatory Commission reported that on the morning of August 19 the unit was operating at 45 percent.

Information derived from the NRC Power Reactor Status Reports:

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

### FPL's 565 MW Duane Arnold Nuclear Unit in Iowa Ramped Up to 96 Percent by August 21

The Nuclear Regulatory Commission reported that on the morning of August 19 the unit was operating at 45 percent.

Information derived from the NRC Power Reactor Status Reports:

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

## STP's 1,251 MW South Texas Nuclear Unit 2 in Texas Reduced to 14 Percent by August 20, Ramped Up to 98 Percent by August 22

The Nuclear Regulatory Commission reported that on the morning of August 19 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/

## Terra-Gen's Combined 270 MW Alta Wind Energy Center Units 4 and 5 in California Shut by August 21

According to the California Independent System Operator, the units reported an unplanned outage on August 21. Unit 4 has a capacity of 102 MW, and unit 5 has a capacity of 168 MW, giving a total capacity of 270 MW offline. http://content.caiso.com/unitstatus/data/unitstatus201108211515.html

#### Calpine's 593 MW Metcalf Gas-fired Unit in California Returns to Service by August 21

According to the California Independent System Operator, the unit reported a return from an unplanned curtailment of 328 MW.

http://content.caiso.com/unitstatus/data/unitstatus201108211515.html

#### Elk Hills Power's 552 MW Elk Hills Gas-fired Unit in California Reduced by August 20

According to the California Independent System Operator, the unit reported an unplanned curtailment of 312 MW on August 20.

http://content.caiso.com/unitstatus/data/unitstatus201108201515.html

### Calpine's 561 MW Los Medanos Gas-fired Unit in California Returns to Service by August 19

According to the California Independent System Operator, the unit reported a return from a planned curtailment of 297 MW.

http://content.caiso.com/unitstatus/data/unitstatus201108191515.html

#### AES's 495 MW Alamitos Gas-fired Unit 6 in California Shut by August 19

According to the California Independent System Operator, the unit reported an unplanned outage on August 19. http://content.caiso.com/unitstatus/data/unitstatus201108191515.html

## **Emergency Siren for Exelon's Limerick Nuclear Plant in Pennsylvania Inadvertently Sounds August 19**

According to a filing with the Nuclear Regulatory Commission (NRC), Limerick Emergency Preparedness Zone Sire #132 in Chester County due to an equipment malfunction.

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110822en.html

### Inadvertent Activation of TDAFW Pump at Progress Energy's 900 MW Harris Nuclear Unit 1 August 19

According to a filing with the Nuclear Regulatory Commission (NRC), the Turbine Driven Auxiliary Feedwater (TDAFW) pump started automatically despite there being no actual condition that would require it to start. The event has been classified as an inadvertent actuation.

http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2011/20110822en.html

### TMPA's 454 MW Gibbons Creek Coal-Fired Unit in Texas Shut Briefly for Tube Leak Repair August 20

Operators planned to restart the unit the same day.

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158211 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158212

#### Update: Xcel Restarting 347 MW Harrington Coal-Fired Unit 2 in Texas August 20-25

The company shut the unit beginning August 18 to fix a tube leak and perform miscellaneous maintenance activities. http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158096

# B Side Transformer Rectifier System Trips at Luminant's 765 MW Monticello Coal-Fired Unit 3 in Texas August 20

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158234

# **Canadian Government Proposes Draft Regulations Covering Coal-Fired Power Plant Emissions August 19**

Beginning July 1, 2015, the rules are set to restrict new coal-fired power plants to the same emission levels as high efficiency natural gas-fired power plants. With a few exceptions, the proposed regulations would also effectively ban new coal-fired plants that do not feature carbon capture and storage (CCS) technology.

http://www.theglobeandmail.com/news/politics/environment-minister-to-unveil-coal-power-emissions-regulations/article2134923/

http://www.businessgreen.com/bg/news/2103297/canada-proposes-crackdown-coal-fired-power

# **Texas PUC Chairwoman Says New EPA Rules Will Cause Rolling Blackouts in Texas August 19**

According to Texas Public Utilities Commission (PUC) Chairwoman Donna Nelson, the Environmental Protection Agency's (EPA) Cross-State Air Pollution Rule will "result in reliability issues and rolling outage in Texas." The new rules, set to go into effect January 1, will require reductions in emissions from power plants. <a href="http://www.star-telegram.com/2011/08/19/3301032/new-epa-rule-will-lead-to-rolling.html">http://www.star-telegram.com/2011/08/19/3301032/new-epa-rule-will-lead-to-rolling.html</a>

### **ERCOT Official Expresses Concern over Increased Demand when Schools Reopen in Texas Next Week**

The chief operating officer of the Electric Reliability Council of Texas (ERCOT) warned during an August 19 Texas Public Utility Commission meeting that schools can add 1,000 to 1,500 MW of demand to the grid. Officials have called for conservation over the past few weeks due to record demand amid high temperatures. http://www.intelligentutility.com/article/11/08/back-school-crush-could-strain-texas-electrical-grid

# Southern Montana Electric Begins Testing New 40 MW Highwood Gas-Fired Generating Station in Great Falls, Montana August 19

The power plant is expected to begin producing power on September 15. The first phase of the plant will generate 40 MW, though a second phase is planned to increase capacity by a further 80 MW.

http://helenair.com/news/state-and-regional/testing-begins-at-power-plant-near-great-falls/article 8ab91cd2-6bea-56b3-8ae4-66ad4e43a448.html

### Wind Capital Group Plans 150 MW Osage County Wind Energy Facility in Osage County, Oklahoma

As part of the project, the company will also construct a power substation and a 138 kV transmission line of unknown length. Construction is set to begin in the fall, with a completion date of June 2012. http://www.rmtinc.com/utility/press\_osage\_county.php

#### Petroleum

# Valero Reports Vacuum Vapor Compressor Upset in Complex #3 at 156,000 b/d McKee, Texas Refinery August 20

Reuters, 12:26 August 21, 2011

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158237

#### FCC Unit 1 Trips Offline at BP's 407,000 b/d Texas City, Texas Refinery August 20

According to a filing with state regulators, adjustments were made to stabilize the fluid catalytic cracker (FCC). DJN, 10:41 August 22, 2011

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158240

# ConocoPhillips Reports Upset at Sulfur Plant 2 at 100,000 b/d Ferndale, Washington Refinery August 20

According to a company filing, operators were in the process of "regaining control of the unit." Reuters, 00:19 August 22, 2011

## Tesoro Restarts Alkylation Unit at 94,300 b/d Wilmington, California Refinery Following Power Outage August 21

 $\underline{\text{http://www.bloomberg.com/news/2011-08-22/gulf-gasoline-weakens-as-hurricane-irene-may-hit-south-carolina.html}$ 

## Petrobras to Have "Sizable Upward Shift" in World O&G Production 2011-2020: Barclays Capital

According to reports, Petrobras plans to increase total oil and gas production from 2.7 million boe/d to 4 million boe/d in 2015 and 6.4 million boe/d in 2020. The company plans to spend \$127.5 billion on exploration and production, both within and outside of Brazil.

http://www.rigzone.com/news/article.asp?a id=110349

#### Update: Eni Planning to Restart Oil Production in Libya

According to reports, Eni has held technical meetings as part of the company's planning process to restart oil facilities in the country. The company's chief executive said last month that, it would take a year to restart oil output, though gas output could resume in just two to three months. According to one analyst, it could take three years for nation-wide oil production to resume to pre-conflict levels of 1.65 million b/d. Reuters, 05:49 August 22, 2011

http://www.firstenercastfinancial.com/news/story/44455-libyan-oil-production-still-ways-off

### Natural Gas

## Number of Uncompleted O&G Wells Going Up Across U.S. Due to Increased Drilling Activity

As companies ramp up drilling operations, the number of uncompleted onshore oil and gas wells across the country has increased. Halliburton reported over 3,500 wells were not completed in the U.S. at the end of the second quarter of 2011. Reasons for the increase include aggressive development, lack of access to pipelines, and lack of sufficient hydraulic fracturing resources to keep up with increased drilling activity. Most uncompleted wells produce natural gas, and are likely to come into operation over the coming years.

 $\frac{http://stocks.investopedia.com/stock-analysis/2011/Uncompleted-Well-Count-Continues-To-Rise-HAL-UPL-CLR-CRK-KWK-ECA0820.aspx?partner=YahooSA\#axzz1VluYwBsg$ 

#### Other News

#### **Energy Department Inspector General Reports Increase in Copper Theft**

The inspector general for the U.S. Department of Energy (DOE), Gregory Friedman, reported a "troubling increase" in the amount of copper thefts from federal sites, including a nuclear lab, substations, and power generation stations. According to Friedman, an estimated \$500,000 to \$750,000 of copper has been stolen from DOE sites over the last three years. Copper prices are reportedly near record levels.

http://moneywatch.bnet.com/economic-news/news/energy-dept-says-copper-thefts-on-rise/6281516/

### **Energy Prices**

U.S. Oil and Gas Prices August 22, 2011			
	Today	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	82.87	87.13	73.24
NATURAL GAS Henry Hub \$/Million Btu	3.99	4.17	4.29

Source: Reuters

### **Energy Notes**

Peak of 14,395 Entergy Customers Lose Power in Louisiana August 19 – Company Says 1,654 Currently without Electricity

http://viewoutage.entergy.com/la.aspx

Peak of 14,000 CVPS Customers Lose Power Following Storms in Vermont August 21 – Just 12 Customers Currently Lack Service

http://finance.yahoo.com/news/3300-Vt-utility-customers-apf-2979546193.html?x=0&.v=1 http://www.cvps.com/customerservice/outages/default.aspx

Nearly 11,000 Duquesne Light Customers Lose Power in Pennsylvania Due to Storms August 19 – All Customers Due to Be Restored August 20

http://www.pittsburghlive.com/x/pittsburghtrib/news/pittsburgh/s\_752578.html

Thunderstorm Kills Power to 10,000 Toronto Hydro Customers in Toronto, Ontario August 21 – By Evening 6,000 Were Still in the Dark

 $\underline{http://www.thespec.com/news/ontario/article/581943--severe-thunderstorm-takes-out-trees-leaves-10-000-people-without-power \\$ 

Baker Hughes Reports Number of Natural Gas Drilling Rigs Operating in U.S. at Highest Level in Nearly Six Months August 19

Reuters, 13:31 August 19, 2011

Explosion at BPA Substation Knocks Out Power to 1,000 Customers in Aberdeen, Washington August 20

 $\underline{http://www.thenewstribune.com/2011/08/21/1790349/explosion-at-aberdeen-substation.html?storylink=rss}$ 

**Duke Energy Plans to Work with Cellular and Other Existing Infrastructure Networks for Smart Grid Deployment** 

http://www.duke-energy.com/pdfs/OP-David-Masters-SmartGrid-Comm-Platform-02-01-11.pdf

Inlet Shutdown on Bearing Problem Reported at Wasson CO2 Removal Plant in Texas August 20-21

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158239

### Acid Gas Compressor Malfunction and Shutdown Reported at Big Lake Gas Plant in Texas August 20

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158241

Compressor Shutdown Reported at Cedar Lake Booster Station in Texas August 20 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158235

### Pressure Build Up Caused by Clogged Drain Takes Down Field Units at Keystone Gas Plant in Texas August 20

http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158238 http://www11.tceq.state.tx.us/oce/eer/index.cfm?fuseaction=main.getDetails&target=158232

### Links

*This Week in Petroleum* from the U.S. Energy Information Administration (EIA) <a href="http://www.eia.gov/oog/info/twip/twip.asp">http://www.eia.gov/oog/info/twip/twip.asp</a> 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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http://www.oe.netl.doe.gov/ead.aspx

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