



ENERGY ASSURANCE DAILY

Friday Evening, September 02, 2016

Major Developments

Hurricane Hermine Makes Florida Landfall, Weakens to Tropical Storm as It Tracks Across Southeast; 284,000 Customers Without Power at 4:15 PM September 2

Hurricane Hermine hit Florida’s northern Gulf Coast producing heavy rains and winds of 80 mph early Friday morning before weakening to a tropical storm and moving inland, impacting parts of Georgia, South Carolina, and North Carolina later in the day. As of 04:15 p.m. EDT, September 02, there were 283,909 customer outages in these three states, and the majority of the system had passed Florida and Georgia. As conditions improve, utility crews will be able to restore power more safely and quickly. Outages in Florida and Georgia were declining as of mid-afternoon Friday as utilities began restoring power in those states, but were increasing in North Carolina and South Carolina as the storm moved towards the northeast. Later on Friday, the system is expected to reach the coastal Carolinas and then move offshore from North Carolina on Saturday. The table below shows state-level customer power outages.

Southeast Customer Power Outages			
September 1 – 2, 2016			
Impacted State	Current Confirmed Customer Outages	Percent of Confirmed State Customers without Power	24-hr Peak Customer Outages*
Florida	158,981	1%	273,166
Georgia	90,289	2%	109,181
South Carolina	34,639	1%	41,072
Total	283,909		

*There is no sum of the Peak Customer Outage column because peaks for individual utilities occur at different times; a total would not reflect peak outages.

- Florida:** As of 04:15 PM EDT, there are 158,981 customer outages in the state of Florida. This is down from a peak of 273,166 customer outages at 07:00 AM EDT. As the storm continues to pass, more utility crews will be able to deploy, assess damage, and restore service.
 - As of 04:15 PM EDT, **Duke Energy**, has 44,884 customer outages. This number is down from 51,867 outages at 07:00 AM EDT. Duke Energy reports they have upwards of 1,200 workers responding to Hermine. Operations centers are stocked and ready to deploy.
 - As of 03:45 PM EDT, **Florida Power and Light (FPL)** is reporting 5,887 customer outages out of a service area of over 4.7 million. They expect to restore power to most customers affected by Hermine within 24 hours after the storm has cleared. The utility said its crews worked overnight to restore power to approximately 60,000 customers.
 - As of 04:15 PM EDT, **Talquin Electric Cooperative** of Tallahassee is reporting 4,947 customer outages. Restoration times are being assessed. According to the utility’s twitter feed said it anticipates restoration may take several days, and possibly even up to 2 weeks in some cases, to fully restore power.
- Georgia:** As of 04:15 PM EDT, there are 90,289 customer outages in the state of Georgia. This is down from a peak of 109,181 customer outages at 01:00 PM EDT. The most impacted areas include the southern and coastal parts of the state. Utilities have not yet assessed damages due to sustained high winds in the affected areas.
 - As of 04:15 PM EDT, **Georgia Power** is reporting 86,144 customer outages, accounting for over 95% of state outages. Restoration times are being assessed.

- **South Carolina:** As of 04:15PM EDT, there are 34,639 customer outages in the state of South Carolina. This is the 24 hour peak for the state. As Hermine passes through the state, that number may increase. Utilities crew are standing by but are not able to respond at this time due to dangerous conditions.
 - As of 04:15 PM EDT, **South Carolina Electric & Gas** is reporting 26,289 customer outages. Restoration times are being assessed.
 - **Duke Energy** meteorologists continue to track Tropical Storm Hermine, and the company is prepared to respond to possible power outages that could occur in the Carolinas. Duke Energy began today moving more than 200 line workers to Morehead City and Wilmington in North Carolina; and to the Florence area in South Carolina.

Storm Watch

Update: Hurricane Lester Forecast to Track North of Hawaiian Islands

As of 2:00 p.m. EDT, the center of Hurricane Lester (Category 2) was about 635 miles east of Hilo, moving west-northwest near 14 mph, with this general motion expected to continue over the new few days. While, the forecast track as of 2:00 p.m. EDT showed the system tracking north of the islands, the Central Pacific Hurricane Center said hurricane conditions are possible Maui County late tonight and Saturday, and are possible over Oahu beginning Saturday.

<http://www.prh.noaa.gov/cphc/tcpages/archive/?prod=TCPCP1.EP132016.36A.201609021807>

Electricity

TVA's 1,125 MW Watts Bar Nuclear Unit 1 in Tennessee Reduced to 10 Percent by September 2

On the morning of September 1 the unit was operating at 95 percent.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

DTE's 1,089 MW Fermi Nuclear Unit 2 in Michigan Reduced to 69 Percent by September 2

On the morning of September 1 the unit was operating at 84 percent.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>

Colorado Officials Say Two Coal-Fired Power Units to Close in Clean Air Deal

Colorado officials on Thursday said one coal-fired power plant will shut down and a part of a second plant will stop operating under an agreement to reduce haze and carbon dioxide. State regulators and utility officials said a coal mine that supplies one of the plants will also cease operating. The Nucla Station power plant in southwestern Colorado will close by the end of 2022. The New Horizon mine will also close. Officials said one unit of the Craig Station plant in northwestern Colorado will close at the end of 2025. Two other units will keep operating with additional pollution controls.

Reuters, 20:31 September 1, 2016

Petroleum

Shell Reports Unit Trip at Its 316,600 b/d Deer Park, Texas Refinery August 25

Royal Dutch Shell reported unit FP3-1100 tripped causing emissions at its Deer Park refinery on August 25, according to a filing with the Texas Commission on Environmental Quality. Shell reported the furnace was being brought online and there was a fire coming out of the west end of the firebox at grade.

Reuters, 18:10 September 1, 2016

Update: LyondellBasell Reports Major Units Fail to Restart after Plant-Wide Power Loss at Its 263,776 b/d Houston, Texas Refinery September 1–2 – Sources

LyondellBasell Industries' Houston refinery failed in attempts on Thursday night and early on Friday morning to restart major production units following a plant-wide power outage, Gulf Coast market sources said on Friday. The refinery's crude distillation, gasoline-producing, and coking units were among those failing to restart, the sources said. Power was knocked out within the refinery at about 1:10 a.m. EDT on Thursday, according to a regulatory filing, forcing the entire plant to shut down. Power was restored within two hours of the outage. The refinery began the restart process on Thursday afternoon, with attempts to resume production taking place late on Thursday and early on Friday. The sources said there are multiple issues on multiple units that the refinery is attempting to address as it tries to bring the refinery back into production. Thursday's power outage may have started when a snake got into a transformer at the refinery, causing the transformer to fail and beginning a cascade of electrical system outages throughout the refinery, the sources said.

Enbridge Announces Deferral of Its 616-Mile Sandpiper Project from Minnesota to Wisconsin September 1

Enbridge Inc. on Thursday announced that an affiliate of Enbridge Energy Partners, L.P. (EEP) will be withdrawing regulatory applications pending with the Minnesota Public Utilities Commission for Sandpiper Pipeline Project, which would have carried North Dakota light crude across Minnesota to Enbridge's terminal in Superior, Wisconsin. EEP cited market conditions and other factors in its explanation for the project deferral. Enbridge said back in February that it expected to push the startup date for Sandpiper back until 2019 because of the need for an environmental review. Then last month Enbridge said it was investing in a different pipeline that would transport North Dakota crude south to Texas, and that it would re-evaluate Sandpiper once that deal was done.

<http://www.enbridge.com/media-center/news/details?id=2083550&lang=en&year=2016>

Reuters, 20:01 September 1, 2016

U.S. Crude Oil Exports Reach 474,000 b/d in July – U.S. Census Bureau

U.S. crude oil exports reached 474,000 b/d in July compared with 383,000 b/d the June, foreign trade data from the U.S. Census Bureau showed on Friday. The exports included 415,000 b/d to Canada, 32,000 b/d to China, 20,000b/d to France, and 6,000 b/d to Brazil.

Reuters, 8:59 September 2, 2016

Natural Gas

Southern Company, Kinder Morgan Finalize Southern Natural Gas Pipeline Strategic Venture September 1

Southern Company and Kinder Morgan on Thursday announced the closing of their natural gas pipeline venture through Southern Company's acquisition of a 50 percent equity interest in the Southern Natural Gas (SNG) pipeline system through a subsidiary of Southern Company Gas. Kinder Morgan will continue to operate the SNG system, an approximately 7,000-mile pipeline system connecting natural gas supply basins in Texas, Louisiana, Mississippi, and Alabama to markets in Louisiana, Mississippi, Alabama, Florida, Georgia, South Carolina, and Tennessee. SNG is a principal transporter of natural gas to Alabama, Georgia, and South Carolina.

<http://www.southerncompany.com/news/2016-09-01-kinder-morgan.cshtml>

Williams Partners Advances Gulf Connector Project; Files Application with FERC to Serve Two Gulf Coast LNG Export Facilities September 1

Williams Partners L.P. on Thursday announced that Transcontinental Gas Pipe Line Company, LLC (Transco) filed an application with the Federal Energy Regulatory Commission (FERC) seeking authorization to construct a 475 MMcf/d expansion in Texas and Louisiana to connect U.S. natural gas supplies with global liquefied natural gas (LNG) markets. Constructed in two phases, the Gulf Connector Project is designed to deliver 75,000 Dth/d to Freeport LNG Development, L.P.'s liquefaction project by the second half of 2018, and 400,000 Dth/d to Cheniere Energy's Corpus Christi liquefaction terminal in 2019. Pending appropriate regulatory approvals, construction on the first phase of the project will begin in the third quarter of 2017 in order to be placed into service during the second half of 2018. Both of the liquefaction facilities are currently under construction. The Freeport LNG export terminal will have three liquefaction trains with expected aggregate export capacity of 15.3 million tonnes per annum (mtpa) and is planned to commence operations in phases between September 2018 and August 2019. Cheniere Energy's Corpus Christi liquefaction terminal is proposed to have up to five liquefaction trains (two of which are under construction) with expected aggregate nominal production capacity of up to 22.5 mtpa of LNG. Trains one and two at the Corpus Christi liquefaction terminal are expected to reach substantial completion in 2019. <http://investor.williams.com/press-release/williams/williams-partners-advances-gulf-connector-project-files-application-ferc-serv>

Other News

Nothing to report.

International News

Nothing to report.

Energy Prices

U.S. Oil and Gas Prices			
September 2, 2016			
	Today	Week Ago	Year Ago
CRUDE OIL			
West Texas Intermediate U.S.	43.12	47.59	46.25
\$/Barrel			
NATURAL GAS			
Henry Hub	2.92	2.86	2.75
\$/Million Btu			

Source: Reuters

Links

This Week in Petroleum from the U.S. Energy Information Administration (EIA)

<http://www.eia.gov/oog/info/twip/twip.asp>

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 ET every Wednesday.

Natural Gas Weekly Update from EIA

<http://www.eia.gov/oog/info/ngw/ngupdate.asp>

Updated after 2:00 PM ET every Thursday.

ENERGY ASSURANCE DAILY

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

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