



ENERGY ASSURANCE DAILY

Tuesday Evening, September 06, 2016

Major Developments

Update: Less than 19,000 Customers Remain without Power across Southeast as of September 6 as Hurricane Hermine Restoration Efforts near Completion

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, North Carolina, and Virginia over the weekend. Over the course of the storm, Hermine affected power to 1,314,631 customers; however, as of 4:00 p.m. EDT Tuesday, approximately 18,700 customers remain without power, with most of the remaining outages in and around Tallahassee, Florida. The City of Tallahassee, which reported more than 73,000 customer outages, said on Saturday it was accepting help from eight mutual aid partners from around the region. On Tuesday, the utility said road clearing and power restoration will continue as crews make significant progress on remaining closures and as of Tuesday afternoon, approximately 10,000 City of Tallahassee customers remained without power. Georgia Power reported at least 264,000 customer outages over the course of the storm. The utility said that it had restored power to more than 200,000 customers by Saturday morning, one day after the storm's passage and showed no significant outages as of Tuesday. Duke Energy Florida, which reported at least 225,300 customer outages, said crews and contractors worked around the clock restoring power to more than 220,000 customers within 48 hours and had no significant outages as of Tuesday. Note that "affected" customers represents the estimated total count of customers that lost power at some point over the course of the storm. These outages may not have occurred concurrently and are often higher than peak outages.

<http://outagemap.duke-energy.com/fl/default.html>

<https://news.duke-energy.com/releases/releases-20160904>

<http://newsroom.fpl.com/2016-09-03-Florida-Power-Light-Company-completes-service-restoration-to-customers-affected-by-Hurricane-Hermine-in-line-with-pre-storm-commitment>

<http://www.fplmaps.com/>

<http://www.talgov.com/gis/outages/default.aspx>

<https://talgov.com/communications/herminerresponse.aspx>

http://www.cfec.com/#!outage-map/sitepage_17

<http://outagemap.clayelectric.com/>

<http://clayelectric.com/news/clay-making-progress-restoring-power>

https://www.jea.com/outage_center/OutageMap_Reporting/

<http://outages.svec-coop.com/>

<http://www.outageentry.com/dvOSM/dvOSM2.php?Client=talq>

<http://outage.preco.coop/>

<https://www.facebook.com/WithlacoocheeRiverElectricCooperativeInc>

<http://www.tampaelectric.com/residential/outages/outagemap/>

<https://twitter.com/tampaelectric>

<http://outage.tcec.com/>

<https://www.facebook.com/TriCountyElectricFlorida>

<http://71.41.34.130:23049/>

<https://twitter.com/TECtwwi/status/771757007581941760>

https://twitter.com/COTNews?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor

https://twitter.com/georgiapower?WT.svl=tw3&hp=dm_db_twitter

<http://outagemap.georgiapower.com/external/default.html>

<https://news.duke-energy.com/releases/releases-20160902>

<https://news.duke-energy.com/hurricane-hermine>

<https://news.duke-energy.com/releases/duke-energy-working-to-restore-power-to-customers-impacted-by-hermine>

<https://www.dom.com/residential/dominion-virginia-power/outage-center/outages-by-region-and-maps>

<http://www.13newsnow.com/news/local/thousands-without-power-in-hampton-roads/313198797http://www.anec.com/>

<http://bemc.maps.sienatech.com/>
<http://outages.ocalafl.org/>
<https://www.facebook.com/OcalaUtilityServices/posts/10154759864453812>
<http://outagemap.gulfpower.com/external/default.html>
<http://cobb.maps.sienatech.com/>
<http://www.flintoutages.com/>
<http://stormcenter.santeecooper.com/default.html>
<http://www.ouc.com/customer-support/outages-and-problems>
<http://outage.union-power.com/>
<http://outages.lumbeeriver.com/>
<http://www.blueridgenow.com/news/20160903/45000-without-power-in-north-carolina-as-hermine-leaves>

Electricity

Wolf Creek's 1,165 MW Nuclear Unit 1 in Kansas Shut September 2

The unit was operating at full power when technical specifications required a shutdown on September 2.

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

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160906en.html>

Update: RRI Energy's 775 MW Ormond Beach Gas-fired Unit 2 in California Returns to Service by September 3

The unit returned from an unplanned curtailment of 525 MW that began on September 2.

<http://content.caiso.com/unitstatus/data/unitstatus201609031515.html>

Crockett's 240 MW Gas-fired Unit in California Shut by September 3

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201609031515.html>

DOE Grants Over \$5 Million to Advance Tidal Energy Development in Maine September 3

The U.S. Department of Energy (DOE) awarded more than \$5 million to advance the development of a tidal energy project in Portland, Maine. Ocean Renewable Power Company of Portland is expected to use the money to complete the commercial design of its TidGen Power System, which will generate power by harvesting the kinetic energy of ocean currents. The project is slated to be tested, operated, and monitored in Washington County, Maine.

Reuters, 09:01 September 3, 2016

Petroleum

Tanker Fire Shuts Section of Houston Ship Channel; Tankers Movements Halted to 4 Refineries September 6

Four Houston-area refineries were unable to receive crude oil from tankers on Tuesday after a portion of the Houston Ship Channel was shut due to a fire aboard an empty tanker, the U.S. Coast Guard said. The fire, which began shortly after midnight on Tuesday from a punctured bunker tank aboard the *Aframax River* tanker, was extinguished within a few hours, and the vessel was moved to a dock such that it was no longer obstructing the water way, the Coast Guard added. Because the channel remains closed to vessel traffic 1 mile southwest from where the vessel caught fire, Valero Energy's 100,000 b/d Houston, Texas refinery; LyondellBasell's 263,776 b/d Houston, Texas refinery; Petrobras' 112,229 b/d Pasadena, Texas refinery; and Shell's 285,500 b/d Deer Park, Texas refinery could not receive oil shipments delivered by tanker. The Coast Guard said that 7 vessels were waiting to exit the channel and 8 were waiting to enter on Tuesday afternoon, adding that tanker were able to move to and from ExxonMobil's 560,500 b/d Baytown, Texas refinery.

Reuters, 14:58 September 6, 2016

Harvest Shuts Crude Oil Pipeline after Rupture at Bay Long, Louisiana September 5

Harvest Pipeline Company shut a segment of its BOA crude oil system in Bay Long, Louisiana after a third party dredging company struck a 12-inch segment, which spilled approximately 5,300 gallons of crude oil, according to the U.S. Coast Guard. The company said the rupture occurred between the Bayou Huertes valve station and the Grand Terre pump station, and that the spill has since been contained.

Reuters, 22:30 September 5

Reuters, 19:13 September 5

PES Reports Unit Startups at Its 335,000 b/d Philadelphia, Pennsylvania Refinery August 30–31

Philadelphia Energy Solutions (PES) reported several unit startups at the Girard Point section of its Philadelphia refinery, including an isomerization unit on August 30, the 1332 reformer unit on August 31, and the 231 hydrodesulfurization unit on August 31, according to a filing with a state regulator. The refinery previously reported flaring associated with unit 862 on August 26–27, and the 1332 reformer unit shutdown on August 29.

Reuters, 15:43 September 2, 2016

Husky Expected to Return to Normal Operations September 6 after Small Fire at its 152,000 b/d Lima, Ohio Refinery September 5

Husky Energy is expected to return to normal operations at its 152,000 b/d Lima, Ohio refinery on Tuesday following a small fire in a non-processing unit over the weekend, according to a source familiar with the plant's operations. The source add that the refinery was running at slightly reduced rates prior to the fire due to weak margins. According to a local news report quoting an Allen County emergency management director, the fire was extinguished on Monday afternoon by the refinery's fire department.

<http://www.hometownstations.com/story/33017806/small-fire-within-husky-refinery>

Reuters, 12:04 September 6, 2016

Reuters, 00:00 September 6, 2016

ExxonMobil Reports HCU Shutdown at Its 344,600 b/d Beaumont, Texas Refinery September 4

ExxonMobil said a compressor trip resulted in the shutdown of a hydrocracker unit (HCU). The company said it was preparing the process unit for startup in order to resume normal operations.

Reuters, 22:40 September 4, 2016

Valero Reports Flaring at Its 293,000 b/d Corpus Christi, Texas Refinery September 2

Valero reported on September 2 that operating conditions within the West Plant of its Corpus Christi, Texas refinery made flaring necessary, according to a community alerting network.

Reuters, 14:40 September 2, 2016

Update: LyondellBasell Restarts CDU at Its 263,776 b/d Houston, Texas Refinery September 2 after Power Outage September 1

LyondellBasell Industries restarted the larger of two crude distillation units (CDU) at its Houston refinery on Friday afternoon, one day after a plant-wide power outage, Gulf Coast market sources said on Saturday. The 147,000 b/d heavy CDU was shut along with the entire refinery by the power outage shortly after midnight on Thursday.

Lyondell tried but was unable to restart the unit early on Friday morning, the sources said. Lyondell wants to return the refinery to a reduced production level by next week, the sources told Reuters.

Reuters, 18:41 September 3, 2016

Alon Reports SCOT Unit Trip at Its 73,000 b/d Big Spring, Texas Refinery September 2

Alon reported an emissions event as a result of a Shell Claus Off-gas Treating (SCOT) unit trip on September 2. The company reported normal operations were resumed after maintenance was completed.

Reuters, 21:41 September 5, 2016

Shell Reports Unit Shutdown at Its 100,000 b/d Scotford, Alberta Facility Shutdown on September 4

Shell reported a unit shutdown at its Scotford, Alberta facility on September 4 and warned of intermittent flaring over the next 48 hours, according to a community information line. The Scotford facility houses a 100,000 b/d refinery and a 255,000 b/d oil sands upgrader.

Reuters, 21:49 September 5, 2016

Saudi Aramco-Motiva in Lead to Buy LyondellBasell's 263,776 b/d Houston, Texas Refinery – Sources

Saudi Aramco and its U.S. refining joint-venture Motiva Enterprises lead the race to buy LyondellBasell Industries' Houston, Texas refinery, according to three sources familiar with the matter. An announcement for the sale of the refinery by Lyondell is expected this week, the sources said.
Reuters, 17:26 September 5, 2016

Chevron Reports Equipment Failure at Its 245,271 b/d Richmond, California Refinery September 3

Chevron reported flaring due to equipment failure at its Richmond, California refinery on September 3, according to regulatory filing made public on Tuesday.
Reuters, 11:11 September 6, 2016

Shell Starts Production at Stones Development in Gulf of Mexico September 6

Shell announced on Tuesday that production has started from the Stones development in the Gulf of Mexico. Stones is expected to produce around 50,000 b/d of oil equivalent when fully ramped up at the end of 2017.

<http://www.shell.com/media/news-and-media-releases/2016/shell-starts-production-at-stones-in-the-gulf-of-mexico.html>

Enbridge Announces Plans to Buy Spectra Energy September 6

Enbridge Inc said on Tuesday it would buy Spectra Energy Corp in an all-stock deal valued at about \$28 billion to create the largest North American energy infrastructure company. Enbridge's pipelines mainly send Canadian oil sands to refiners on the U.S. Gulf Coast, while Spectra's network ships natural gas to the U.S. East Coast. The transaction was unanimously approved by the Boards of Directors of both companies and is expected to close in the first quarter of 2017, subject to shareholder and certain regulatory approvals, and other customary conditions.

<http://www.enbridge.com/media-center/news/details?id=2083920&lang=en&year=2016>

Natural Gas

ExxonMobil Reports Unit Shut at Its 65 MMcf/d Dollarhide Gas Plant in Texas September 3

ExxonMobil reported the Wauk-3 unit shut on low engine oil pressure and the alarm would not clear. Wells were shut in to mitigate flaring. The oil level switch was cleaned and repaired and the unit was restarted.

<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=242794>

Enbridge Reports Power Outage at Its 150 MMcf/d Tilden Gas Plant in Texas September 4

Enbridge reported a power outage caused the plant to go offline. All gas was routed to the flare to curtail emissions and the flow and process were adjusted to minimize downtime. Once power was restored, the system was brought back online.

<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=242803>

Magnitude 5.6 Earthquake Rocks Oklahoma, Surrounding States; State Orders 35 Oil and Gas Wastewater Disposal Wells Shut

According to the U.S. Geological Survey (USGS), a magnitude 5.6 earthquake rattled the area northwest of Pawnee beginning at 8:03 a.m. EDT on Saturday, with tremors felt from South Dakota to Texas. The earthquake, which was only 4.1 miles deep, fueled concerns about the environmental impact of oil and gas drilling, which has been blamed for a massive spike in minor to moderate quakes in the region. Shortly after the incident, the state Corporation Commission ordered 37 wastewater disposal wells within a 725-square-mile area to shut down within 7 to 10 days, Oklahoma Governor Mary Fallin said via Twitter. The USGS said in a statement that while many earthquakes in Oklahoma have been triggered by wastewater fluid injection, it cannot currently conclude the cause of the quake without studying the specifics of the wastewater injection and oil and gas production in the area of the quake's epicenter. The USGS said it will continue to process seismic data to help confirm the cause.

<https://www.usgs.gov/news/magnitude-56-earthquake-oklahoma>

<https://twitter.com/GovMaryFallin/status/772141513757167616>

<http://www.occeweb.com/>

Reuters, 15:53 September 3, 2016

International News

Shell Nigeria Lifts Force Majeure on Bonny Light Exports after Leak August 12

Shell's Nigerian unit, Shell Petroleum Development Co. (SPDC), said it has lifted a force majeure on Bonny Light exports effective Tuesday following the re-opening of Nembe Creek Trunk Line (NCTL) by the operator, Aiteo. Shell declared force majeure on August 12 following the shutdown of NCTL after a leak was detected.

Reuters, 11:47 September 6, 2016

Iran Ready to Raise Oil Output to 4 Million b/d in Next 2–3 Months – NIOC

Iran is ready to raise its oil production to 4 million b/d in the next two to three months depending on market demand, a senior official from the National Iranian Oil Company (NIOC) said on Monday. Iran's plans to return output to pre-sanctions levels of more than 4 million b/d comes just ahead of an informal meeting later in September among members of the Organization of the Petroleum Exporting Countries (OPEC) in Algeria, where they are expected to seek to revive a deal on freezing global output. Iran is currently producing a little over 3.8 million b/d.

http://www.rigzone.com/news/oil_gas/a/146463/NIOC_Iran_Ready_To_Raise_Oil_Output_To_4MMbpd_Dependi ng_On_Demand

Colombia Halts Pumping on Its 210,000 b/d Cano Limon Pipeline after Bomb Attack September 2

Colombia's state oil company Ecopetrol on Monday said a leftist rebel bomb attack halted pumping operations along its 485-mile Cano-Limon Covenas oil pipeline. The attack by National Liberation Army (ELN) guerrillas occurred on Saturday in a rural area of northern Norte de Santander province, close to the border with Venezuela, the company said. The incident did not halt production or exports.

http://www.downstreamtoday.com/news/article.aspx?a_id=53392

Energy Prices

| U.S. Oil and Gas Prices | | | |
|--|-------|----------|----------|
| September 6, 2016 | | | |
| | Today | Week Ago | Year Ago |
| CRUDE OIL West Texas Intermediate U.S. \$/Barrel | 44.80 | 46.92 | 46.44 |
| NATURAL GAS Henry Hub \$/Million Btu | 2.85 | 2.88 | 2.67 |

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.

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

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