Office of Electricity Delivery and Energy Reliability

Infrastructure Security and Energy Restoration

ENERGY ASSURANCE DAILY

Monday Evening, June 06, 2016

Electricity

Thunder Storms Knock Out Power to Over 48,000 Customers in Mid-Atlantic June 5

Strong thunder storms producing high winds and lightning knocked out power to at least 48,400 customers in Delaware, New Jersey, and Pennsylvania on Sunday evening. As of 3:30 p.m. EDT Monday, 7,587 customers remained without power. Wind gusts of up to 74 mph were reported, bringing down trees and power lines. PSE&G and Atlantic City Electric were the hardest hit utilities with 19,000 customer outages each in New Jersey. The table below shows total affected customers and the latest reported outages by utility. The "Affected" column shows the total count of customers that lost power at one point or another over the course of the storm for each utility. These outages may not have occurred concurrently and are not the same as peak outages.

Mid-Atlantic Customer Power Outages June 5-6, 2016					
Electric Utility	State	Affected	Latest Reported		
Delmarva Power	DE	2,400	257		
Atlantic City Electric	NJ	19,000	88		
PSE&G	NJ	19,000	6,303		
PECO	PA	8,000	939		
TOTAL*		48,400	7,587		

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

Sources:

http://www.delmarva.com/pages/connectwithus/outages/outagemaps.aspx

http://www.atlanticcityelectric.com/pages/connectwithus/outages/outagemaps.aspx

https://s3.amazonaws.com/outagecenter.pseg.com/external/default.html

https://www.peco.com/ layouts/peco/OutageMap.aspx

http://www.nbcphiladelphia.com/weather/stories/First-Alert-Severe-Storms-Possible-Sunday-381798601.html

http://www.nj.com/gloucester-

county/index.ssf/2016/06/thousands without power after storm sweep through.html

Potomac Edison Reports 41,000 Customers without Power Due to Transmission Line Issue in Maryland June 6

Potomac Edison on Monday afternoon reported approximately 41,000 Potomac Edison customers in Frederick, Montgomery, Carroll, and Howard counties, Maryland were without power due to an unspecified transmission line issue. As of 3:30 p.m. EDT Monday 7,200 customers had been restored and the utility said it expected full restoration by approximately 5:00 p.m. EDT Monday.

http://outages.firstenergycorp.com/mdwv.html

 $\underline{https://twitter.com/PotomacEdison?ref\ src=twsrc\%5Egoogle\%7Ctwcamp\%5Eserp\%7Ctwgr\%5Eauthor}$

Storm, High Winds Knock Out Power to Over 40,000 We Energies Customers in Wisconsin June 5

Strong storms producing damaging winds and hail knocked out power to over 40,000 We Energies customers in southeastern Wisconsin on Sunday evening. Wind gusts of up to 70 mph were reported. We Energies said power should be fully restored by the end of the day on Monday. As of 2:30 p.m. CDT Monday, 2,002 customers remained without power.

http://www.we-energies.com/outagemapext/

https://twitter.com/we energies

http://www.washingtontimes.com/news/2016/jun/6/strong-storms-leaves-30000-without-power/

Tropical Storm Colin Knocks Out Power to Over 26,000 Customers in Florida June 6

Tropical Storm Colin hit Florida's west coast on Monday with maximum sustained winds near 50 mph, knocking out power to at least 26,165 customers. As of 3:30 p.m. EDT Monday, 13,865 customers remained without power. The table below shows total affected customers and the latest reported outages by utility. The "Affected" column shows the total count of customers that lost power at one point or another over the course of the storm for each utility. These outages may not have occurred concurrently and are not the same as peak outages. As of Monday afternoon, the storm was moving northeast at approximately 17 mph and expected to increase in forward speed, according to the National Hurricane Center. A rapid northeastward motion was expected Monday night and Tuesday, moving near the southeastern coast of the U.S. later on Tuesday. Florida Governor Rick Scott declared a state of emergency on Monday due to the threat of serious flooding. Localized coastal flooding is possible along the Florida east and Georgia coasts within the Tropical Storm Warning area, as well as in the Tropical Storm Watch area along the Georgia and South Carolina coasts.

Florida Customer Power Outages June 6, 2016					
Electric Utility	State	Affected	Latest Reported		
Tampa Electric	FL	11,396	3,739		
Duke Energy Florida	FL	7,500	4,084		
Florida Power and Light	FL	2,654	2,654		
Withlacoochee River Elec Coop	FL	1,629	1,629		
Clay Electric Cooperative	FL	1,630	1,630		
Gainesville Regional Utilities	FL	1,356	129		
TOTAL*		26,165	13,865		

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

Sources:

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

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

http://www.fplmaps.com/

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

http://outagemap.clayelectric.com/

https://www.gru.com/OutageMap/default.jsp#table

http://www.wtsp.com/news/local/ts-colin-power-outages-in-tampa-bay/234195460

http://abcnews.go.com/US/wireStory/tropical-storm-colin-gains-strength-nears-florida-39638290

http://www.nhc.noaa.gov/text/refresh/MIATCPAT3+shtml/061751.shtml

PG&E Reports 16,700 Customers Experience Brief Power Outage in Northern California June 5, Cause under Investigation

Pacific Gas and Electric (PG&E) reported 16,700 customers were without power on Sunday night between San Francisco and Daly City, California. The outage began at 10:13 p.m. PDT, and ended at 11:58 p.m. PDT, according to a PG&E spokesman. The cause of the outage was unknown and under investigation.

https://m.pge.com/?WT.ac=Home Outage#outages

http://kron4.com/2016/06/06/over-16000-customers-briefly-without-power-in-sf-daily-city/

Update: Entergy's 813 MW FitzPatrick Nuclear Unit in New York Ramps Up to 95 Percent by June 4

On the morning of June 3 the unit was operating at 65 percent, reduced from 99 percent on June 2. http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/

PSE&G's 1,049 MW Hope Creek Nuclear Unit 1 in New Jersey Reduced to 24 Percent by June 6

On the morning of June 5 the unit was operating at 70 percent, reduced from full power on June 3. http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/

Talen Energy's 1,105 MW Susquehanna Nuclear Unit 1 in Pennsylvania Reduced to 18 Percent by June 6

The unit shut from full power to address a small water leak inside the containment structure.

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

 $\frac{http://talenenergy.investorroom.com/2016-06-O6-Susquehanna-Schedules-Unit-1-Shut-Down-to-Address-Maintenance-Issue}{Maintenance-Issue}$

FirstEnergy's 831 MW Beaver Valley Nuclear Unit 2 in Pennsylvania Reduced to 80 Percent by June 4

On the morning of June 3 the unit was operating at full power.

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

Update: Exelon's 1,134 MW Limerick Nuclear Unit 2 in Pennsylvania at Full Power by June 4

On the morning of June 3 the unit had restarted and ramped up to 23 percent. The unit was removed from service on June 1 due to an electrical component malfunction that impacted the unit's recirculating water pumps. The pumps circulate water in the reactor and were not required for safe shutdown.

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

http://www.exeloncorp.com/newsroom/limerick-unit-2-offline-(2)

FPL's 565 MW Duane Arnold Nuclear Unit in Iowa Reduced to 40 Percent by June 6

On the morning of June 5 the unit was operating at full power.

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

High Desert Power's 830 MW Gas-fired Unit in California Reduced by June 5

The unit entered an unplanned curtailment of 122 MW.

http://content.caiso.com/unitstatus/data/unitstatus201606051515.html

Desert Start Energy Center's 495 MW Gas-fired Unit in California Reduced by June 5

The unit entered an unplanned curtailment of 120 MW.

http://content.caiso.com/unitstatus/data/unitstatus201606051515.html

PG&E's 404 MW Helms Hydro Unit 3 in California Shut by June 5

The unit entered an unplanned outage.

http://content.caiso.com/unitstatus/data/unitstatus201606051515.html

Midway-Sunset Cogeneration's 248 MW Gas-fired Unit in California Reduced by June 5

The unit entered an unplanned curtailment of 110 MW.

http://content.caiso.com/unitstatus/data/unitstatus201606051515.html

RRI Energy's 215 MW Mandalay Gas-fired Unit 2 in California Shut by June 4

The unit entered an unplanned outage.

http://content.caiso.com/unitstatus/data/unitstatus201606041515.html

Update: Alberta Oil Sands Cogeneration Capacity Declines to 601 MW June 6 – AESO

Cogeneration electric plants' output around Fort McMurray in Alberta, Canada declined over the weekend to 601 MW early on Monday, compared with 751 MW late on Friday, the Alberta Electric System Operator (AESO) said on Monday. There was about 3,200 MW of power cogeneration capacity serving the oil sands industry in Alberta, with about two-thirds located in the Fort McMurray area. Before the wildfires started, the Fort McMurray units were producing about 1,300 MW, according to local media reports.

Reuters, 8:01 June 6, 2016

FirstEnergy Says Power Plants Prepared to Operate Reliably through High-Demand Summer Months

FirstEnergy Corp. on Monday said its nuclear, coal, and natural gas generating stations in Ohio, Pennsylvania, and West Virginia have completed preparations that support reliable operations during the hot summer months. The National Weather Service has predicted that most of the continental U.S., including areas served by FirstEnergy's utilities, will experience above-average temperatures from June through August 2016. FirstEnergy said the comprehensive preventive maintenance work it performed at its three non-emitting nuclear facilities, six coal-fired generating stations, and six natural gas and oil plants will help the company meet customers' electricity needs when air conditioning use increases.

 $\underline{https://www.firstenergycorp.com/newsroom/news_releases/firstenergy-s-power-plants-prepared-to-operate-reliably-through-2.html$

Petroleum

Update: Union Pacific Says 16 Rail Cars Hauling Bakken Crude Oil Derailed in Oregon June 3; FRA Says Bakken Oil Met State Vapor Pressure Limits June 6

Union Pacific confirmed late on Friday that a 96-car train hauling Bakken crude oil derailed, spilled oil, and caught fire along the Columbia River Gorge about 70 miles east of Portland, Oregon near the town of Mosier. The company said the train originated in Eastport, Idaho, and was bound for U.S. Oil and Refining Co.'s 40,700 b/d Tacoma, Washington refinery some 200 miles northwest of the incident location. The Oregon Department of Transportation said oil spilled from at least one car, but multiple cars caught fire. While no injuries were reported, the train remained engulfed in flames for about 6 hours after the derailment, and firefighters managed to extinguish the blaze by early on Saturday, according to the Federal Rail Administration (FRA). By Sunday, a Union Pacific spokesman said most of the cars that derailed and caught fire had been removed from the site, adding that a total of 16 rail cars derailed, up from the company's previous report of 11 derailed cars late on Friday. Since the incident, the Environmental Protection Agency, Coast Guard, Washington State Department of Ecology, and FRA officials were monitoring air quality and taking soil samples to assess site safety as well as environmental impacts. Washington ecology officials and the FRA said there were no signs of oil entering the Colombia River or nearby Rock Creek. A FRA spokesman confirmed on Monday that the vapor pressure of the Bakken crude oil involved in last Friday's train derailment was in compliance with new Oregon State regulations enacted last year. Specifically the vapor pressure of the Bakken crude oil on the train was 9.2 pounds per square inch (psi), below the cap of 13.7 psi established by Oregon state regulators in April 2015. The relatively higher vapor pressure levels associated with Bakken crude oil streams have been identified as a possible factor in derailment explosions involving Bakken unit trains.

Reuters, 09:17 June 6, 2016 Reuters, 17:47 June 5, 2016 Reuters, 22:53 June 3, 2016 Reuters, 18:17 June 3, 2016

Shell Expects No Impact on Offshore Assets from Tropical Storm Colin June 6; ExxonMobil Says Operations Normal at Its Texas Refineries June 5

A tropical depression along the southern U.S. was upgraded on Sunday to Tropical Storm Colin, which was expected to hit Florida's Gulf Coast by Monday, the U.S. National Hurricane Center said. Royal Dutch Shell on Monday said based on current forecasts, it expects no impact at its offshore assets due to tropical storm Colin. Shell said it would continue to monitor the situation and make decisions accordingly. ExxonMobil Corp on Sunday said it was monitoring the weather but operations were normal at its 560,500 b/d Baytown and 344,600 b/d Beaumont refineries in Texas.

Reuters, 1:22 June 6, 2016 Reuters, 22:21 June 5, 2016

Update: Imperial's Kearl Oil Sands Operations in Alberta Return to Normal, Monitoring Remains in Place June 3

Imperial Oil Ltd on Friday announced the safe return to normal operations at its Kearl oil sands site after it was shut on May 8 due to the Fort McMurray wildfire. Kearl's physical plant was not damaged by the fires, and air quality monitoring remains in place. The company said it will continue to closely monitor developments with the fires in the Regional Municipality of Wood Buffalo. The project was expected to produce 12,000 b/d by the fourth quarter 2016.

http://www.imperialoil.ca/Canada-English/about_media_releases_20160603.aspx

United Refining Reports Power Outage at Its 65,000 b/d Warren, Pennsylvania Refinery June 5

United Refining Co reported a power outage at its Warren, Pennsylvania refinery on June 5. There were no additional details available.

Reuters, 10:48 June 6, 2016

Marathon Reports Electrical Outage at Its 242,000 b/d Catlettsburg, Kentucky Refinery June 3; Compressor Shut June 4

Marathon Petroleum Corp reported an electrical outage occurred at the south-end of its Catlettsburg, Kentucky refinery, due to unknown causes on June 3, according to a filing with the National Response Center. On June 4, Marathon reported a compressor was shut.

Reuters, 10:58 June 6, 2016

Reuters, 10:57 June 6, 2016

Motiva Shuts FCCU at Its 603,000 b/d Port Arthur, Texas Refinery to Repair Leaking Pipeline June 4; Reports Unplanned Maintenance Underway June 6 – Source

Motiva shut the 81,000 b/d fluid catalytic cracking unit (FCCU) at its Port Arthur, Texas refinery on Saturday to repair a leaking pipeline, according to sources familiar with the refinery's operations. The company confirmed on Monday that unplanned maintenance was underway at the refinery, but did not comment on which units. Sources said the FCCU is expected to return to production on Wednesday after repairs are completed. Reuters, 09:29 June 6, 2016

Flint Hills Reports SRU Upset, Flaring All Clear at Its 290,000 b/d Corpus Christi, Texas Refinery June 6

Flint Hills Resources reported an upset at sulfur recovery unit (SRU) no. 1 at its Corpus Christi East, Texas refinery on June 6, according to a filing with the National Response Center. Earlier, Flint Hills reported an all clear with flaring, according to a community line alert.

Reuters, 00:49 June 6, 2016

Reuters, 10:40 June 6, 2016

Update: LyondellBasell's 263,776 b/d Houston, Texas Refinery Operating at 83 Percent Capacity June 3 – Source

LyondellBasell Industries' Houston, Texas refinery was processing about 220,000 b/d of crude oil, or 83 percent of daily capacity, the highest level since an April 8 coker fire, Gulf Coast market sources said on Friday. Repairs to the 42,000 b/d coker, the smaller of two at the refinery, are expected to be completed by July 1, the sources said. The coker was the first of four units at the refinery shut between April 8 and 15 in a string of outages and accidents that forced production down to 85,000 b/d. Between May 1 and May 8, Lyondell restarted the 120,000 b/d crude distillation unit (CDU) and two vacuum distillation units (VDU), each of which has a capacity of 91,000 b/d. All three units were shut due to leaks. The refinery's 147,000 b/d CDU remained in operation, though at reduced throughput because of the shutdown of the attached VDU. The April 8 fire started when a pipe ruptured. Lyondell is replacing piping on the unit with a type that is more resistant to corrosion than that which failed, sources have said. The 57,000 b/d coker remains in operation.

Reuters, 20:32 June 3, 2016

Phillips 66 Says Operations at Its 247,000 b/d Sweeny, Texas Refinery Unaffected by Tank Fires June 3

Phillips 66 said fires in four tanks had no impact on operations at its Sweeny, Texas, refinery on Friday. The fires burned for about three and half hours on Friday morning before being extinguished by refinery personnel. No injuries were reported due to the blazes.

Reuters, 20:41 June 3, 2016

Chevron Reports Unplanned Flaring, Breakdown at Its 265,500 b/d El Segundo, California Refinery June 4

Chevron Corp reported unplanned flaring due to a breakdown at its Segundo, California refinery, according to a filing with the South Coast Air Quality Management District.

Reuters, 16:25 June 4, 2016

ExxonMobil Reports Underground Pipeline Shut at Its 149,500 b/d Torrance, California Refinery June 5; Unplanned Flaring June 6

ExxonMobil Corp reported an underground pipeline shutdown following release of a corrosive chemical at its Torrance, California refinery, according to a filing with the California Emergency Management Agency on Sunday. ExxonMobil said there were no reported fires or impact to waterways, the filing added. On Monday, the company reported unplanned flaring at the refinery, according to a filing with the South Coast Air Quality Management District.

Reuters, 23:54 June 5, 2016 Reuters, 2:59 June 6, 2016

Tesoro Reports Unit Upsets Due to Power Loss at Its 257,300 b/d Carson, California Refinery June 6

Tesoro Corp said on Monday that a power loss led to unit upsets at its 257,300 barrel-per-day Carson, California refinery. Power has been restored and the cause of the power outage is under investigation, the company said in a statement. Tesoro did not identify the units involved in the incident. Earlier, the company reported breakdown and flaring at the refinery, according to a filing with state pollution regulators.

Reuters, 14:18 June 6, 2016 Reuters, 11:56 June 6, 2016

Natural Gas

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

ExxonMobil reported unit P-9 shut on high discharge pressure. The unit would not restart due to issues with the electric panel. The relay inside the panel was repaired and the unit was restarted and monitored. http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=234622

Consolidated Edison, Crestwood Form Northeast Pipeline, Storage Joint Venture in New York, Pennsylvania June 6

Consolidated Edison (Con Edison) and Crestwood Equity Partners on Monday announced that they have completed the formation of a new joint venture, Stagecoach Gas Services, to own and develop Crestwood's existing natural gas pipeline and storage business located in southern New York and northern Pennsylvania. As part of the transaction, Crestwood contributed its existing interstate natural gas pipeline and storage business to Stagecoach and a subsidiary of Con Edison Transmission. Subject to New York State regulatory approval and the satisfaction of certain other closing conditions, Crestwood has also agreed to contribute to Stagecoach Gas Services its existing New York intrastate pipeline and Con Edison Transmission has agreed to contribute approximately \$30 million, which will be distributed to Crestwood.

http://www.crestwoodlp.com/investors/news/news-details/2016/Consolidated-Edison-and-Crestwood-Announce-Closing-of-Northeast-Pipeline-and-Storage-Joint-Venture/default.aspx
http://www.stagecoachgs.com/Home/default.aspx

Other News

Nothing to report.

Update: French Workers Vote to Extend Strike at Le Havre Oil Terminal; Total Restarts Refineries affected by Strike June 6

Workers at oil storage and supply services company CIM, which handles about 40 percent of French crude imports, voted on Monday to extend their strike at Le Havre port until Wednesday, a CGT union official said. Le Havre is France's second-biggest oil port and the action by workers, as part of nationwide strikes against a planned labor reform, has disrupted the delivery of crude to refineries and products through the Trapil pipeline. Total on Monday said it began restart operations at its 101,000 b/d Grandpuits, 247,000 b/d Gonfreville, and 117,000 b/d Feyzin refineries that have been shut since late May by the strikes. On Friday, Total said it was planning to restart operations at its 220,000 b/d Donges refinery after a majority of workers voted on resume work but the site was being blocked by about 30 members from the CGT union. France has eight refineries with a total refining capacity of nearly 1.5 million b/d of oil.

Reuters, 8:45 June 6, 2016 Reuters, 8:34 June 6, 2016

Energy Prices

U.S. Oil and Gas Prices June 6, 2016				
	Today	Week Ago	Year Ago	
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	49.66	49.25	57.70	
NATURAL GAS Henry Hub \$/Million Btu	2.31	1.75	2.59	

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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