



ENERGY ASSURANCE DAILY

Monday Evening, April 11, 2016

Electricity

Storms Cut Power to 41,620 Navopache Electric Cooperative, APS, and SRP Customers in Arizona Sunday, April 10

Storms in the Phoenix metro area Sunday afternoon cut power to 17,040 Navopache Electric Cooperative customers, 24,500 APS customers, and 80 SRP customers, according to local media. Officials reported that outages impacting Navopache Electric Cooperative customers, including residents in Lakeside and Pinetop, were likely caused by a downed tree. Power was restored to all customers later that afternoon and evening.

<http://www.abc15.com/news/region-phoenix-metro/north-phoenix/aps-2600-customers-without-power-in-north-phoenix>

<http://www.azcentral.com/story/news/local/arizona-weather/2016/04/10/mogollon-rim-communities-have-massive-power-outage/82874410/>

Transformer Explosion Cuts Power to 8,700 LADWP Customers in Los Angeles April 6

Approximately 8,700 Los Angeles Department of Water and Power (LADWP) customers in the Studio City and Sherman Oaks areas lost power Wednesday night when a regulator inside Electric Distributing Station 49 failed catastrophically. The failure caused an explosion and cut all power served by the distribution station. The utility expected to fully restore power by the following afternoon.

<http://abc7.com/news/studio-city-transformer-explosion-causes-widespread-power-outage/1280273/>
<http://www.ladwpnews.com/go/doc/1475/2806798/>

Update: TVA's 1,118 MW Browns Ferry Nuclear Unit 3 in Alabama Returns to Full Power by April 11

The unit returned to full power following a reduction that began April 6 after an unusual event was declared due to a main steamline high radiation condition.

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

Dominion Reports Safety Issue While Shutting Its 1,130 MW Millstone Nuclear Unit 3 in Connecticut for Refueling Outage April 10

Dominion reported late Saturday night that as it was reducing power on Millstone Unit 3 for a scheduled refueling outage, a surveillance test revealed an issue affecting the secondary containment boundary, according to a filing with the U.S. Nuclear Regulatory Commission. Operators will investigate the issue and make repairs during the refueling outage, the filing said. On the morning of April 9 the unit was operating at 96 percent.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2016/>
<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160411en.html>

Exelon's 855 MW Quad Cities Nuclear Unit 1 in Illinois Reduced to 86 Percent by April 10

On the morning of April 9 the unit was operating at full power.

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

APS's 1,243 MW Palo Verde Nuclear Unit 1 in Arizona Shut by April 9

On the morning of April 8 the unit was operating at 95 percent.

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

La Paloma Generating Company's 260 MW Gas-fired Unit 2 in California Shut by April 10

The unit entered a planned and unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201604101515.html>

Update: AES's 175 MW Alamitos Gas-fired Unit 1 in California Returns to Service by April 8

The unit returned from an unplanned curtailment of 110 MW that began by March 9.

<http://content.caiso.com/unitstatus/data/unitstatus201604081515.html>"

Update: AES's 498 MW Alamitos Gas-fired Unit 5 in California Returns to Service by April 8

The unit returned from an unplanned outage that began by April 6.

<http://content.caiso.com/unitstatus/data/unitstatus201604081515.html>

Update: AES's 495 MW Alamitos Gas-fired Unit 6 in California Returns to Service by April 8

The unit returned from an unplanned outage that began by April 6.

<http://content.caiso.com/unitstatus/data/unitstatus201604081515.html>"

Update: EDF Renewable Energy's 110 MW Catalina Solar Unit in California Returns to Service by April 8

The unit returned from an unplanned outage that began by March 31.

<http://content.caiso.com/unitstatus/data/unitstatus201604081515.html>

PCWA's 177 MW Colgate Hydro Unit 1 in California Shut by April 8

The unit entered a planned and unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201604081515.html>"

Mirant's 312 MW Pittsburg Gas-fired Unit 5 in California Shut by April 8

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201604081515.html>"

Clean Energy Future Plans 940 MW Natural Gas-fired Power Plant in Ohio for Summer 2018; Project Will Use Ohio and Pennsylvania Shale Gas

Macquarie Infrastructure Partners III and Siemens Financial Services announced April 6 that they have entered an agreement to construct Lordstown Energy Center (LEC), a 940 MW combined cycle gas turbine electric power generation facility. The LEC site is approximately 50 miles southeast of Cleveland, OH, in Lordstown. The developer of the project, Clean Energy Future, plans to use shale gas from the Utica and Marcellus basins at the power plant. The project has received all required approvals and permits. Construction will begin immediately, and the facility is expected to commence commercial operations in the summer of 2018. Power produced by LEC will be delivered into the PJM market. The plant will replace a portion of the more than 18 gigawatts of coal-fired generating capacity in the region that has been retired since 2012.

http://www.cleveland.com/business/index.ssf/2016/04/gas-fired_power_plant_going_up.html

<http://www.businesswire.com/news/home/20160406005829/en/Macquarie-Led-Consortium-Enters-Agreement-Construct-Lordstown-Energy>

Update: Consumers Energy to Shut Seven Coal-fired Units in Michigan by April 15

Consumers Energy reported seven of its coal-fired power plants will shut down by this Friday, including B.C. Cobb Units 4 and 5 in Muskegon, 320 MW; J.C. Weadock Units 7 and 8 in Hampton Township (Bay County), 310 MW; and J.R. Whiting Units 1, 2, and 3 in Luna Pier, 328 MW. The utility said it's closing the coal plants because it would cost too much to upgrade them to meet new federal and state environmental regulations. Consumers, in part, will replace the power generated by the seven coal plants with a recently acquired natural gas plant in Jackson. A spokesman said the utility also plans to invest more in other energy sources and a new natural gas plant.

<http://www.lenconnect.com/article/20160410/BUSINESS/160408921>

NRC Approves Entergy's Plan to Fix Violations at Its 1,075 MW Waterford Nuclear Unit 3 in Louisiana

The U.S. Nuclear Regulatory Commission (NRC) on Friday approved Entergy Corp's request to take a series of corrective actions after an investigation found violations at its Waterford 3 nuclear power plant in Louisiana. Workers there had failed to perform fire inspections and falsified records, an NRC investigation revealed. The company has agreed to review its fire watch programs and improve training sessions, the NRC said in a notice.
www.nrc.gov/docs/ML1609/ML16099A090.pdf

FERC Issues Order Supporting Grid Assurance's Plan to Store, Sell Equipment to Power Companies as Needed During Emergencies

The Federal Energy Regulatory Commission (FERC) issued a positive order March 25 to Grid Assurance™ that provides regulatory clarity supporting transmission-owning entities participating in and subscribing to Grid Assurance as a way to strengthen transmission grid resiliency. Grid Assurance had requested determinations on several issues from FERC in December 2015. Eight electric utilities and energy companies announced Grid Assurance on June 10, 2015 as a limited liability company that expects to offer subscribers cost-effective solutions for enhancing transmission grid resiliency and protecting customers from prolonged transmission outages. Specifically, Grid Assurance will "store circuit breakers, large transformers, and other crucial parts at secure, unidentified locations, and sell them to participating utility companies who need them during emergencies."
<http://www.wsj.com/articles/utilities-seek-to-stockpile-essential-parts-for-disasters-1460076194>
<http://www.aei.org/publication/private-sector-wisely-acts-to-protect-power-grid/>
<https://www.aep.com/newsroom/newsreleases/?id=1938>
<http://www.ferc.gov/CalendarFiles/20160325163047-EL16-20-000.pdf>

Massachusetts Raises Solar Energy Caps; Law Could Jumpstart Stalled Solar Projects

The measure given final approval by lawmakers last week and signed Monday by Republican Gov. Charlie Baker raises caps on the state's net metering program. Net metering allows homeowners, solar developers, and municipal governments to sell excess power they generate back to the electrical grid in exchange for credit. Existing net metering caps have been reached in much of Massachusetts, stalling some solar projects. Under a compromise negotiated by lawmakers, residential and municipal projects will be reimbursed at the full retail rate while most commercial developers would be reimbursed at the less generous wholesale rate.

Reuters, 12:46 April 11, 2016

<http://www.mass.gov/governor/press-office/press-releases/fy2016/governor-signs-comprehensive-solar-legislation-into-law.html>

Petroleum

Update: TransCanada Restarts 590,000 b/d Keystone Pipeline at Reduced Pressure April 10

TransCanada on Sunday restarted the Keystone pipeline at the restricted operating pressure allowed under a Corrective Action Order issued by the Pipeline and Hazardous Materials Safety Administration. The pipeline, which delivers light and heavy crude from Hardisty, Alberta, to Cushing, Oklahoma, and Illinois, was shut on April 2 after a potential leak was discovered in South Dakota. The company says it is continuing cleanup and land restoration at the site of the spill, which TransCanada estimates was about 400 barrels, or just under 17,000 gallons. TransCanada also will be reviewing construction records, doing additional inspections of the pipeline and additional ground and air monitoring, a spokesman said Monday. A timeline for running the pipeline at full rates has not been set, the spokesman said. Federal regulators sent the company an order Saturday that said an "anomaly" on a weld on the pipeline was to blame for the leak, but the cause wasn't immediately determined. When a third-party metallurgist hired by TransCanada discovered the leak, it was releasing oil at a rate of about two drops per minute.

Reuters, 12:46 April 11, 2016

<http://www.wsj.com/articles/transcanada-restarts-keystone-oil-pipeline-after-leak-1460321025>
<http://dfw.cbslocal.com/2016/04/11/transcanada-resumes-oil-shipments-through-keystone-pipeline/>

Shell Reports Process Unit Upset at Its 316,600 b/d Deer Park, Texas Facility April 11

Royal Dutch Shell reported an unspecified process unit upset at its Deer Park refinery on Monday, according to a community alert.

Reuters, 10:26 April 11, 2016

Update: Iowa Utilities Board Approves 600,000 b/d Dakota Access Pipeline April 8

The Iowa Utilities Board on Friday reported it issued a hazardous liquid pipeline permit to Dakota Access, LLC, a Texas company planning to develop an interstate crude oil pipeline from North Dakota to Illinois. The entire pipeline will run approximately 1,154 miles beginning from the Bakken/Three Forks play in North Dakota, through portions of South Dakota and Iowa, and ending in Patoka, Illinois. The North Dakota Public Service Commission approved a siting permit for the Dakota Access Pipeline in January 2016. Construction of the project cannot begin until the U.S. Army Corps of Engineers also issues a permit.

<https://iub.iowa.gov/sites/default/files/files/media/releases/2016/0408-HLP-permit-issued.pdf>

http://wcfcourier.com/news/local/govt-and-politics/iowa-utilities-board-approves-oil-pipeline/article_6249c933-bde3-58cb-b915-f558be2432e9.html

HCU Snag Leads to Flaring at ExxonMobil's 560,000 b/d Baytown, Texas Refinery April 8

ExxonMobil reported flaring at its Baytown refinery on Friday was due to an incident involving a hydrocracking unit (HCU), according to a filing with the National Response Center made public on Monday. Operators reported the flaring after depressurizing a reactor in response to a high temperature alarm. A flange had leaked on the reactor (hydroformer 3), which led to release of benzene.

Reuters, 11:00 April 11, 2016

Valero Reports Flaring at Its 205,000 b/d Corpus Christi, Texas Refinery April 10

Valero Energy Corp. reported that unspecified operating conditions at its Corpus Christi plant made flaring necessary on Sunday, according to a community alerting system.

Reuters, 09:30 April 10, 2016

PBF Energy Reports Emissions at Its 182,200 b/d Delaware City, Delaware Refinery April 11

PBF Energy reported emissions on Monday in a filing with a state pollution regulator.

Reuters, 01:51 April 11, 2016

Natural Gas

Update: Aliso Canyon Gas Storage Field Likely to Remain Inactive for Another Year – PUC Executive

Southern California Gas Company's (SoCalGas) natural gas storage field at Aliso Canyon will likely remain inactive for at least another year, California Public Utilities Commission (CPUC) President Michael Picker said Friday at a public workshop on energy reliability. State energy officials have predicted that the L.A. Basin and surrounding counties could face up to 14 days this summer and 32 days in the coming year when utilities might order limited power outages to avoid larger blackouts. Picker said he was unwilling to permit SoCal Gas to inject gas into the underground reservoir or withdraw gas from it until all 114 wells on the 4,600-acre Aliso Canyon field have been tested according to the rules set out by the state Division of Oil, Gas and Geothermal Resources. SoCalGas said Thursday that it expected to be able to fully test enough of its wells to make the field operable by late summer.

<http://www.scpr.org/news/2016/04/08/59394/aliso-canyon-gas-field-to-remain-stalled-another-y/>

Other News

Nothing to report.

International News

Iran Exporting 350,000 b/d of Crude Oil to India, Hopes for More – Sources

Iran is exporting around 350,000 barrels of crude oil a day to India and hopes to increase this number, Oil Minister Bijan Zanganeh was quoted as saying Saturday. Industry sources last week said Indian refiners are looking to ramp up purchases of Iranian crude after sanctions on Tehran were lifted in January, bringing India's imports to at least 400,000 b/d in the coming year.

Reuters, 06:06 April 9, 2016

Energy Prices

| U.S. Oil and Gas Prices April 11, 2016 | | | |
|--|--------------|-----------------|-----------------|
| | Today | Week Ago | Year Ago |
| CRUDE OIL West Texas Intermediate U.S. \$/Barrel | 40.41 | 34.07 | 51.38 |
| NATURAL GAS Henry Hub \$/Million Btu | 1.98 | 1.87 | 2.63 |

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

Energy Assurance Daily provides a summary of public information concerning current energy issues. Published Monday through Friday to inform stakeholders of developments affecting energy systems, flows, and markets, it provides highlights of energy issues rather than a comprehensive coverage. *Energy Assurance Daily* is updated online Monday through Friday after 5:00 p.m. ET. For more information, visit the Infrastructure Security and Energy Restoration (ISER) website at:

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

Please direct comments and questions to: ead@oe.netl.doe.gov