



ENERGY ASSURANCE DAILY

Tuesday Evening, February 21, 2017

Electricity

Power Restoration Continues across California Following Heavy Rains, Winds February 17–21

A series of storms beginning Friday, February 17, brought significant rainfall and heavy winds to portions of Northern and Southern California, knocking out power to at least 351,623 customers over the weekend with impacts lingering into Tuesday. Heavy rain and winds with gusts up to 80 mph were persistent across Pacific Gas & Electric’s (PG&E’s) and Sacramento Municipal Utility District’s (SMUD’s) Northern California service territories throughout much of the weekend with another round of heavy rains forecast between Sunday and Tuesday morning. Southern portions of the state experienced historic rainfall totals and wind gusts of up to 80 mph beginning Friday morning across the Southern California Edison (SCE), Los Angeles Department of Water and Power (LADWP), and San Diego Gas & Electric (SDG&E) service territories. PG&E, the hardest hit utility with at least 130,000 outages since last Friday, has more than 3,000 people and 70 crews working to restore power for customers. PG&E said crews have traveled from Washington, Arizona, and New Mexico to assist in the restoration efforts. As of 3:30 p.m. EST, Tuesday at least 45,408 customers remained without power. The table below shows the latest reported outages by utility.

| California Customer Power Outages February 17–21, 2017 | |
|---|-----------------|
| Electric Utility | Latest Reported |
| Pacific Gas & Electric | 38,991 |
| Los Angeles Department of Water and Power | 6 |
| Southern California Edison | 6,254 |
| Sacramento Municipal Utility District | 9 |
| San Diego Gas & Electric | 148 |
| TOTAL* | 45,408 |

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

Sources:

- <http://www.santacruzsentinel.com/general-news/20170217/winds-leave-many-on-central-coast-without-power>
- <https://m.pge.com/index.html?sf21987867=1&sf22045740=1&sf22049333=1&sf22094385=1&sf22392870=1&sf22466858=1&sf38867977=1&sf38981278=1#outages>
- <http://www.ladwpnews.com/go/doc/1475/2917282/>
- https://www.ladwp.com/ladwp/faces/header/outageinformation?_afLoop=482619459721587&_afWindowMode=0&_afWindowId=pf2lvdq8_1
- <https://www.sce.com/wps/portal/home/outage-center/check-outage-status>
- <https://www.smud.org/en/outages/>
- <https://www.sdge.com/safety/outages/outage-map>
- <http://www.mercurynews.com/2017/02/19/los-angeles-storm-leaves-up-to-20000-without-power/>
- <http://patch.com/california/redondbeach/67-000-southern-california-edison-customers-dark-due-storm>
- <http://www.kion546.com/news/power-outage-impacting-businesses-in-monterey/348174724>
- <http://fox40.com/2017/02/17/smud-reports-65000-customers-without-power/>
- <http://www.sandiegouniontribune.com/news/public-safety/sd-me-power-outage-20170217-story.html>

Less Than 3,000 Customers Remain without Power February 21 after Strong Storms Hit Texas February 19–20

Powerful storms producing strong winds knocked out power to at least 142,100 customers in Texas overnight Sunday into Monday. Wind gusts up to 70 mph were reported, knocking down trees and powerlines. CPS Energy, the hardest hit utility with at least 84,500 customer outages, reported that two large-scale transmission towers were destroyed by the storms. Austin Energy said the majority of its customer outages were due to damage to its electrical equipment, adding that crews responded to multiple reports of broken power poles and downed power lines. The utility said it expected full restoration by mid-day Wednesday. As of 3:30 p.m. EST on Tuesday, 2,805 customers remained without power. The table below shows the latest reported outages by utility.

| Texas Customer Power Outages | |
|-------------------------------------|------------------------|
| February 19–21, 2017 | |
| Electric Utility | Latest Reported |
| CPS Energy | 1,419 |
| Austin Energy | 57 |
| AEP Texas | 1,315 |
| Bluebonnet Electric Cooperative | 14 |
| TOTAL* | 2,805 |

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

Sources:

http://outagemap.cpsenergy.com/CPSSStaticMapsEXT/CPSSStaticMapV2_EXT.html

<http://newsroom.cpsenergy.com/cps-energy-storm-update/>

https://twitter.com/cpsenergy?ref_src=twsrc%5Etfw

<https://twitter.com/austinenergy>

<https://my.austinenergy.com/outages/external/default.html>

<http://outagemap.aeptexas.com.s3.amazonaws.com/external/default.html>

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

<https://twitter.com/BluebonnetCoop>

<http://outage.bluebonnetelectric.coop:82/>

<http://abcnews.go.com/US/severe-storm-leaves-40000-power-san-antonio/story?id=45605659>

<http://www.kvue.com/weather/severe-weather-causes-house-fire-rips-off-roof-of-southeast-austin-building/409948355>

<http://kxan.com/2017/02/20/fast-moving-storm-rips-through-central-texas-some-damage-reported/>

FPL's 839 MW Saint Lucie Nuclear Unit 2 in Florida Shut by February 20

On the morning of February 19 the unit was operating at 67 percent. The cause of the shutdown was not immediately known.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

Update: PG&E's 641 MW Colusa Gas-fired Unit in California Returns to Service by February 18

The unit returned from an unplanned curtailment of 281 MW that began on February 17.

<http://content.caiso.com/unitstatus/data/unitstatus201702181515.html>

Explosion, Fire Shuts VDU, CDU at PBF Energy's 151,300 b/d Torrance, California Refinery February 18

An explosion and fire from the vacuum distillation unit (VDU) at PBF Energy's Torrance, California refinery forced the partial shutdown of the refinery early on Saturday. PBF shuttered the plant's crude distillation unit (CDU) after the pre-dawn blaze, energy industry intelligence service Genscape reported. Torrance City firefighters, along with firefighters from the refinery, extinguished the fire within a half hour after it was first reported around 6:00 a.m. PST, according to Torrance officials. A PBF spokesman said no injuries were reported from the explosion and fire, and that the VDU was isolated from other production units while the rest of the refinery continued to operate. The 98,000 b/d VDU further refines residual crude oil by-product from the CDU, increasing the yield of material that can be refined into motor fuels. Officials said the fire appeared to originate from a pump seal failure on a line carrying heavy gas oil from the VDU. The Torrance refinery is a major supplier of gasoline to the Los Angeles metropolitan area, providing about 10 percent of the gasoline consumed in California. An explosion on February 18, 2015 from the main gasoline-producing unit at the Torrance refinery, then owned and operated by ExxonMobil Corp, led to higher gasoline prices on the West Coast. California requires cleaner-burning fuel than most other U.S. states and is geographically isolated from major refining centers on the Gulf Coast and Midwest, leaving the California market tightly balanced between West Coast refinery production and product imports.

Reuters, 18:14 February 18, 2017

Reuters, 14:38 February 18, 2017

Marathon Cuts Production at Its 273,000 b/d Catlettsburg, Kentucky Refinery Beginning in January amid Weak Margins – Source

Marathon Petroleum Corp has cut production by 11 percent at its Catlettsburg, Kentucky, refinery over the past month as gasoline margins have sunk under the weight of record high inventories, according to a source familiar with the plant's operations. The refinery is running at 195,000 b/d, down from 220,000 b/d four weeks ago, the source said.

Reuters, 13:16 February 21, 2017

ExxonMobil Reports Normal Operations at Its 502,500 b/d Baton Rouge, Louisiana Refinery February 19 after Power Upset February 17

ExxonMobil Corp said on Sunday its Baton Rouge, Louisiana, refinery had returned to normal operations after a power supply upset on Friday. The Baton Rouge refinery and adjoining chemical plant utilized the safety flare system Friday night and early Saturday due to power supply disruption from Entergy's Louisiana Station, an ExxonMobil spokeswoman said.

Reuters, 12:21 February 20, 2017

LyondellBasell Reports Pipeline Leak at Its 263,776 b/d Houston, Texas Refinery February 20

LyondellBasell Industries on Monday reported a leak was discovered on the claus unit tail gas line at its Houston, Texas refinery, according to a filing with the Texas Commission on Environmental Quality. The leaking section of the pipe was isolated and blocked in and caused no offsite impact or disruption to operations, LyondellBasell said.

Reuters, 19:36 February 20, 2017

Reuters, 9:57 February 21, 2017

PBF Reports Emissions at Its 192,500 b/d Chalmette, Louisiana Refinery February 19

PBF Energy reported a benzene release from a leaking overhead pipeline at its Chalmette, Louisiana refinery on February 19, according to a filing with the National Response Center made public on Tuesday.

Reuters, 11:43 February 21, 2017

Shell Reports Process Unit Upset at Its Deer Park, Texas Facility February 21

Shell reported unplanned flaring activity due to a process unit upset at Deer Park, Texas facility on Tuesday, according to a community information line. The company operates a 285,500 b/d joint-venture refinery at the Deer Park facility.

Reuters, 10:34 February 21, 2017

Chevron Reports Emissions at Its 245,271 b/d Richmond, California Refinery February 21

Chevron Corp reported emissions at its Richmond, California refinery, according to a filing with the California Emergency Management Agency. Chevron reported the release of an unknown amount of hydrogen due to atmospheric conditions, which caused the release to ignite.

Reuters, 7:21 February 21, 2017

Shell Reports Upset at Its 145,000 b/d Puget Sound, Washington Refinery February 16

Royal Dutch Shell reported an upset at its Puget Sound, Washington refinery on February 16, according to a filing with the Northwest Clean Air Agency made public on Friday.

Reuters, 15:56 February 20, 2017

Enbridge Shuts Its 442,000 b/d Line 2A Light Crude Oil, Condensate Pipeline Following Third Party Damage in Alberta February 17

Enbridge Inc. on Saturday said it was responding and working to recover nearly 53,000 gallons of light crude oil condensate released from Line 2A following a third-party line strike in Strathcona County, Alberta on Friday, February 17. Both Line 2A and Enbridge's 800,000 b/d Line 67 heavy crude pipeline were initially shut as a precaution, however, Line 67 restarted by Sunday, February 19. Enbridge said the oil was contained in an excavation pit at a privately-owned industrial site south of its Edmonton Terminal, where TransCanada and its contractor, Ledcor, were conducting construction activities at the time of the incident. Downstream operations were normal on Monday, according to a company spokeswoman, but there was no estimated date for restarting the line. On Tuesday, Canada's National Energy Board (NEB) said Line 2A will need to be drained for several days, presumably to improve safety conditions as crews remediate the spill and repair the line. An undisclosed shipper on Line 2A said his company's volumes so far were not affected, according to Reuters.

<http://www.enbridge.com/projects-and-infrastructure/public-awareness/strathcona-county-incident-response>

http://www.enbridge.com/~media/www/Site%20Documents/Delivering%20Energy/LiquidsPipelines/Pipeline%20Configuration%20Map_%20Q1%202014.pdf

Reuters, 12:27 February 21, 2017

Reuters, 17:45 February 20, 2017

Update: DOE Issues Notice to Sell 10 Million Barrels of SPR Sour Crude in February

The U.S. Department of Energy (DOE) issued a notice of sale for 10 million barrels of sour crude oil from the Strategic Petroleum Reserve (SPR) on Tuesday, citing Section 5010 of the 21st Century Cures Act, which directs the Secretary of Energy to drawdown and sell 25 million barrels of SPR crude oil over three consecutive years, commencing with 10 million barrels in fiscal year 2017. DOE said the crude would be drawn from the Bryan Mound and Big Hill sites in Texas, and the West Hackberry site in Louisiana, using Bonito Sour as the reference crude oil stream. Bids must be received no later than 2:00 p.m. CST, Wednesday, March 1, and contracts will be awarded to successful offerors no later than March 10.

<https://energy.gov/fe/articles/notice-sale-crude-oil-strategic-petroleum-reserve-announced-today>

Natural Gas

Nothing to report.

Other News

Nothing to report.

Colombia's 210,000 b/d Cano-Limon Oil Pipeline Stops Pumping after Second Bomb Attack in a Week – Officials

Pumping operations along Colombia's 485-mile Cano-Limon Covenas oil pipeline were halted due to a bomb attack by rebels from the Marxist ELN group, a police and a military official said on Monday. The attack, the second in a week against the pipeline, occurred on Sunday in a rural area of La Blanquita in central Boyaca province, state oil company Ecopetrol said. Production and exports from the Cano Limon fields were not interrupted. There were 43 attacks on the pipeline in 2016 and 13 so far this year, according to Ecopetrol, which owns the pipeline. Reuters, 14:04 February 20, 2017

Iraq's Oil Reserves Increase to 153 Billion Barrels – Oil Minister

Iraq's oil reserves have increased to 153 billion barrels, from a previous estimate of 143 billion barrels, the Oil Minister said on Sunday. The increased estimate is the result of appraisals and exploration carried out at seven oil fields in central and southern Iraq, he said.

http://www.rigzone.com/news/oil_gas/a/148565/Iraqs_Oil_Reserves_Increase_To_153_Billion_Barrels_Oil_Minister_Says

Mexico to Cut Gasoline Costs Slightly, Begin Setting Daily Prices – Finance Ministry

Mexico's Finance Ministry said on Friday that national gasoline prices would fall 2 cents per liter on Saturday, but prices would be set daily beginning this week as the country moves toward a free market for gasoline. Mexico raised gasoline prices by 14 percent at the start of the year, which sparked protests and looting around the country. The hike helped drive the annual inflation rate in January to its highest level in more than four years.

Reuters, 21:34 February 17, 2017

www.gob.mx/cre

Iraq, Iran Consider Building Pipeline to Export Kirkuk Crude – Iraqi Oil Ministry

Iraq and Iran signed a memorandum of understanding on Monday to study the construction of a pipeline to export crude oil from the northern Iraqi fields of Kirkuk via Iran, the Iraqi oil ministry said. The agreement, signed in Baghdad by the oil ministers of the two countries, also calls for a commission to solve a conflict about joint oilfields and the possible transportation of Iraqi crude to Iran's Abadan refinery. The pipeline would help Iraq diversify the export routes of crude produced in Kirkuk and reduce its reliance on transit through the Kurdish Region Government's territory. The flow of Kirkuk crude was interrupted for several months last year as the Iraqi government disagreed with the Kurds on their share in the national oil revenue and budget.

http://www.downstreamtoday.com/news/article.aspx?a_id=55411

Energy Prices

| U.S. Oil and Gas Prices | | | |
|-------------------------------------|-------|----------|----------|
| February 21, 2017 | | | |
| | Today | Week Ago | Year Ago |
| CRUDE OIL | | | |
| West Texas Intermediate U.S. | 53.97 | 53.52 | 29.54 |
| \$/Barrel | | | |
| NATURAL GAS | | | |
| Henry Hub | 2.74 | 2.12 | 1.87 |
| \$/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

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