



# ENERGY ASSURANCE DAILY

Thursday Evening, January 23, 2014

## *Electricity*

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### **2011 Pacific Southwest Blackout That Left 2.7 Million Customers Without Power Likely Caused by Reliability Violations – FERC**

The Office of Enforcement at the U.S. Federal Energy Regulatory Commission (FERC) on Wednesday preliminarily determined several companies had violated various reliability standards, causing a blackout in 2011 that left about 2.7 million customers in the Pacific Southwest without power. The outages affected parts of Arizona, southern California, and Baja California in Mexico. Some customers were without power for up to 12 hours, FERC said. The companies alleged to have violated the reliability standards are Pinnacle West Capital Corp.'s Arizona Public Service utility, the California Independent System Operator, Imperial Irrigation District, Edison International's Southern California Edison, Western Area Power Administration, and the Western Electricity Coordinating Council Reliability Coordinator. The outage started with the loss of Arizona Public Service's Hassayampa-North Gila 500 kV power line that transports electricity from generators in Arizona through the Imperial Irrigation District service area in Southern California and into the San Diego area. FERC and the North American Electric Reliability Corp (NERC) said in a report in April 2012 the loss of one big power line was not the sole cause of the widespread outage. The loss of the Hassayampa-North Gila line caused the power flows to move onto lower voltage power lines, creating overloads that eventually resulted in the blackout, FERC and NERC said in the 2012 report. During the event, FERC and NERC said in the report that the Western Electricity Coordinating Council reliability coordinator issued no directives and the transmission operators took only "limited mitigating actions." Reuters, 15:30 January 22, 2014

### **Update: Progress Energy's 900 MW Harris Nuclear Unit 1 in North Carolina Restarts by January 22, Ramps Up to 90 Percent by January 23**

The unit restarted and was operating at 5 percent by the morning of January 22, according to the Nuclear Regulatory Commission. The unit was shut from full power due to a fire in the switchgear room on January 18. The fire was extinguished when the 480 VAC bus was de-energized.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2014/>

### **Update: Luminant's 1,150 MW Comanche Peak Nuclear Unit 1 in Texas at Full Power by January 23**

The unit, which restarted and ramped up to 7 percent by January 21, was operating at 90 percent on the morning of January 22, according to the Nuclear Regulatory Commission. The unit was shut by January 19 from full power due to a turbine trip.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2014/>

### **Entergy's 1,207 MW Grand Gulf Nuclear Unit 1 in Mississippi Reduced to 79 Percent by January 23**

On the morning of January 22 the unit was operating at full power, according to the Nuclear Regulatory Commission.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2014/>

### **FirstEnergy Reports Radioactive Water Leak at Its 1,235 MW Perry Nuclear Plant in Ohio January 20**

The operator of FirstEnergy's Perry nuclear plant in North Perry, Ohio, reported finding water containing radioactive tritium at concentrations above drinking water limits outside of a building at the plant January 20. The water originated from a leak in a valve on a reactor water cooling line and did not pose a threat to the public.

[http://www.cleveland.com/open/index.ssf/2014/01/perry\\_nuclear\\_power\\_plant\\_is\\_1.html](http://www.cleveland.com/open/index.ssf/2014/01/perry_nuclear_power_plant_is_1.html)

## **Ormat Reaches Commercial Operation of Newly Refurbished 6 MW Mammoth G1 Geothermal Power Plant in California January 23**

Ormat Technologies, Inc. announced today that it successfully completed the scope of work needed to bring the Mammoth G1 geothermal power plant in Mono County, California, to full capacity. The 6 MW plant reached commercial operation under the new power purchase agreement (PPA) with Pacific Gas and Electric Company (PG&E) that allows for hourly energy deliveries of up to 7.5 MW and now receives the full commercial rate defined in the PPA. The Mammoth G1 plant commenced operation in 1984 under a Standard Offer Contract No. 4 PPA with Southern California Edison Company (SCE). In March 2013, Ormat announced the termination of its PPA with SCE and the signing of a new 20-year PPA with PG&E for the full output of the facility. The power plant was refurbished in 2013.

<http://www.ormat.com/news/latest-items/ormat-reaches-commercial-operation-newly-refurbished-mammoth-g1-power-plant>

## ***Petroleum***

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### **Flint Hills' 289,097 b/d Corpus Christi, Texas Refinery Flares on Power Outage January 22 – Media Report**

The Flint Hills Corpus Christi refinery began flaring at 7:50 a.m. CST on Wednesday after a transformer failure affected electrical power supplies, the Corpus Christi Caller-Times reported on its website. Power has since been restored in some areas of Corpus Christi. Valero Energy Corp.'s 200,000 b/d Corpus Christi refinery warned nearby residents on Wednesday morning of possible flaring due to the power outage. Citgo Petroleum Corp.'s 163,000 b/d refinery in Corpus Christi on Wednesday also warned of possible flaring due to the power outage.

Reuters, 13:43 January 22, 2014

### **ExxonMobil Says No Output Impact From Injured Worker Incident at Its Baytown, Texas Facility January 22**

ExxonMobil Corp. said on Wednesday that there was no impact to production due to an incident involving a contractor who was performing work at its Baytown, Texas, facility. A worker was injured on Wednesday after falling into a reactor while performing an overhaul on a shut gofiner unit at the refinery, according to sources familiar with operations at the refinery. The company will conduct an investigation in order to better understand what occurred, a company spokesperson said. The Baytown facility houses a 560,500 b/d refinery but the company did not confirm whether the incident occurred at the refinery.

Reuters, 15:57 January 22, 2014

### **Shell Puts Out Fire at Its Deer Park, Texas Facility January 22**

Royal Dutch Shell Plc said it had extinguished a fire involving a unit at its Deer Park, Texas, facility on Wednesday. The cause was under investigation, the company said. The Deer Park facility houses a 327,000 b/d refinery.

Reuters, 16:35 January 22, 2014

### **Petrobras Says No Impact From Exchanger Leak at Its 100,000 b/d Pasadena, Texas Refinery January 22**

Petrobras said there was no impact on production or operations from a hydrocarbon leak, the source of which was a cooling water exchanger, at its refinery in Pasadena, Texas. The refinery reported the leak on Wednesday, according to a filing with the Texas Commission on Environmental Quality.

Reuters, 10:01 January 23, 2014

### **Phillips 66 Reports Equipment Malfunction, Start-up Procedures at Its 362,000 b/d Wood River, Illinois Refinery January 22**

Phillips 66 reported an equipment malfunction at its Wood River refinery in Roxana, Illinois, which led to sulfur dioxide and nitrogen dioxide emissions, a filing with the Illinois Emergency Management Agency pollution regulator showed. On Wednesday the company had begun standard start-up procedures to bring a unit affected by a fire on Tuesday back into service. The company had earlier said a small process unit fire that began after a leak at the refinery had been extinguished.

Reuters, 4:27 January 23, 2014

Reuters, 18:24 January 22, 2013

## **ExxonMobil Reports No Production Impact From Mechanical Breakdown at Its 238,600 b/d Joliet, Illinois Refinery January 21**

ExxonMobil Corp. said on Wednesday there was no impact to production from the mechanical breakdown, which occurred on Tuesday, at its Joliet refinery in Channahon, Illinois. The company had earlier reported flaring due to the breakdown at the refinery, according to a filing with the Illinois Emergency Management Agency. Reuters, 6:50 January 22, 2014

## **PBF Reports Loss of Both SRUs, Flaring at Its 180,000 b/d Paulsboro, New Jersey Refinery January 22**

PBF Energy Inc. reported the loss of both sulfur recovery units (SRUs) on Wednesday at its refinery in Paulsboro, New Jersey, according to a filing with the National Response Center. The event occurred due to weather affecting instrumentation which caused hydrogen sulfide gas to go to the flare, the filing said.

Reuters, 00:43 January 23, 2014

[http://www.nrc.uscg.mil/reports/rwservlet?standard\\_web+inc\\_seq=1071792](http://www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=1071792)

## **Hawaii Independent Energy Says Its 94,000 b/d Kapolei, Hawaii Refinery Returns to Full Operation January 23 After Processing Units Shut January 21**

Hawaii Independent Energy said on Thursday its refinery in Kapolei, Hawaii, had returned to full operation following an unspecified incident that resulted in a brief shutdown of several processing units at the facility. No disruption to product supply was anticipated and an investigation is underway, according to a company spokesperson. An unexpected shutdown of a sulfur recovery unit was reported at the refinery on January 21, according to a notice filed with the National Response Center.

Reuters, 13:37 January 23, 2014

[http://www.nrc.uscg.mil/reports/rwservlet?standard\\_web+inc\\_seq=1071782](http://www.nrc.uscg.mil/reports/rwservlet?standard_web+inc_seq=1071782)

## **Enterprise and Enbridge's 400,000 b/d Seaway Crude Oil Pipeline Connected to 750,000 Barrel ECHO Storage Terminal in Texas**

The Seaway pipeline, co-owned by Enterprise and Canada's Enbridge Inc., from the Cushing, Oklahoma hub to Texas is now connected to Enterprise Product Partners' Enterprise Crude Oil Houston (ECHO) storage terminal near Houston, a filing with energy regulators showed on Wednesday. Seaway said because the main trunk line project had been completed earlier than the construction of a lateral to the ECHO terminal, it had designated a point close to Jones Creek as a temporary destination from which shippers could use other pipelines to reach its terminal. With the completion of this portion of the original Seaway reversal project, these Seaway shippers now have the direct access to the ECHO Terminal that they originally contracted for, said the filing from Seaway Crude Pipeline Company LCC with the Federal Energy Regulatory Commission (FERC). New delivery destinations now include the ECHO terminal as well as Phillips 66's 247,000 b/d Sweeny, Texas, refinery. Other destinations include Freeport in Brazoria County and Katy in Harris County, while Jones Creek has been struck off the list. Seaway began operations in May 2012, expanding its capacity to 400,000 b/d in January 2013. The ECHO terminal has three tanks capable of storing 750,000 barrels of crude. By the time its expansion is completed in early 2015, it will be able to hold over 6 million barrels with direct connections to refineries with an aggregate capacity of 3.6 million b/d.

Reuters, 17:41 January 22, 2014

## ***Natural Gas***

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Nothing to report.

## ***Other News***

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Nothing to report.

### Shell's Nigerian 28-inch Trans Niger Pipeline Opened, 24-inch Remains Shut January 23

Royal Dutch Shell's 28-inch Nigerian Trans Niger Pipeline, one of two which Shell operates carrying Nigeria's Bonny Light crude oil, re-opened after closing on January 17 due to leakages caused by oil theft, a spokesperson said on Thursday. The other, a 24-inch pipeline, remains closed for maintenance and there is no timeframe for re-opening, the spokesperson said.

Reuters, 7:23 January 23, 2014

## Energy Prices

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U.S. Oil and Gas Prices			
January 23, 2014			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b>			
<b>West Texas Intermediate U.S.</b>	97.69	93.55	96.37
\$/Barrel			
<b>NATURAL GAS</b>			
<b>Henry Hub</b>	5.55	4.45	3.63
\$/Million Btu			

Source: Reuters

## Links

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***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](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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