



# ENERGY ASSURANCE DAILY

Friday Evening, May 06, 2016

## Major Developments

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### Update: About 1 Million b/d of Oil Sands Production Estimated Offline in Alberta as Fort McMurray Wildfire Forces Additional Curtailments May 6

A large wildfire that broke out on Sunday continued to disrupt oil sands company operations near Fort McMurray, Alberta, on Friday. While oil sands facilities are not in the fire's direct path, at least 1 million b/d of capacity were offline on Friday, according to calculations by Reuters. The region can produce roughly 2.2 million b/d. More than 20 oil operations are clustered in a 60-mile radius of the city, according to government data. The following companies have reported impacts as of Thursday. The red text under each company below indicates an update to the wildfire impacts reported in yesterday's EAD publication.

- **BP Canada** has declared a force majeure resulting in the reduction of available Western Canadian Select crude, among other Canadian grades, following wildfires in Alberta's oil sands region, according to trade sources. BP told clients that available Canadian crudes will be reduced during May.
- **Suncor Energy**, whose oil sands operations are closest to the city, has closed its 350,000 b/d main mining site. Suncor has also closed its MacKay River and Firebag thermal oil sands operations. It cited the precautionary shut-in of takeaway pipelines and limited availability of diluent. Prior to the fire, Suncor said it was operating at reduced rates of approximately 300,000 b/d because of a turnaround. Suncor said it expects to promptly return to full production and restart planning is well advanced.
- **Syncrude**, a 315,000 b/d oil sands project owned by a consortium of companies, including majority owner Suncor, has completely shut down extraction at its Aurora bitumen mine and is operating other facilities at minimum levels. Syncrude was operating at reduced levels prior to the fire for a turnaround.
- **Royal Dutch Shell Plc** said it had closed its Muskeg River and Jackpine oil sands mines, whose combined capacity is 255,000 b/d.
- **Nexen Energy** said late on Wednesday that it was shutting its Long Lake oil sands facility. Long Lake can produce around 50,000 b/d of synthetic crude but has been operating at reduced rates since late January due to an explosion at the plant.
- **ConocoPhillips** said on Thursday it had shut its 30,000 b/d Surmont operations, south of Fort McMurray, and evacuated the site.
- **Husky Energy** said it had cut production at its Sunrise oil sands project to 10,000 b/d from 30,000 b/d after a pipeline that supplies the project with diluent was shut down.
- **Connacher Oil and Gas Ltd** said on Thursday it was restoring production at its Great Divide operation, which is 50 miles south of the city, back up to 8,000 b/d, after cutting it to 4,000 b/d on Wednesday. The operation produced 14,000 b/d in the fourth quarter.
- **Canadian Natural Resources Ltd** said it has seen some Alberta oil sands operations outages, but current operations at Horizon project remain stable at this time.
- **Statoil ASA** said production at its Leismer oil sands project has been cut by 50 percent to 10,000 b/d to preserve supplies of diluent.
- **Athabasca Oil Corp** said it shut its Hangingstone project and evacuated all personnel. The fire front is estimated to be within 3 miles of the Hangingstone site on Thursday afternoon. The company said it was in the process of shutting down the well sites and the central facility. The project was expected to produce 12,000 b/d by the fourth quarter 2016.
- **Imperial Oil Ltd** said on Friday that as a precaution, workforce levels at its Kearl oil sands mining project have been reduced to essential staff only and production has been reduced by an unspecified amount. It said its physical plant is unaffected by the fires.
- **Cenovus, Imperial, MEG Energy, and Japan Canada Oil Sands Ltd.** said their operations near Fort McMurray were not affected.

- **Enbridge Inc.** said all pipelines in and out of its Cheecham terminal have been isolated and shut down. The terminal was shut down to allow employees to evacuate. Enbridge said operations at its Athabasca terminal had been reduced **while Line 19, south of Kirby Lake, continues to operate.**
- **Keyera Corp** said its South Cheecham rail and truck terminal, 47 miles south of Fort McMurray, has been evacuated and shut down. South Cheecham is a joint venture between Keyera and Enbridge.
- **Inter Pipeline** has shut down its 346,000 b/d Corridor pipeline system that serves Shell's oil sands facilities and partially shut down its 540,000 b/d Polaris diluent pipeline.
- **Pembina's** Algar to Cheecham Lateral remains fully operational but is not delivering due to the shutdown of downstream facilities. All other Pembina facilities in the Fort McMurray area remain fully operational.
- **TransCanada Corp** said it does not expect the wildfire to affect deliveries of natural gas. The nearest pipeline is about 12 miles west of the current wildfire.

The wildfire also blocked transportation of crude and feedstocks normally delivered via trains, pipelines, and roads across the vast oil sands. The big cuts by some of the world's major producers boosted prices, even as concerns about immediate supplies to refineries across the border from Texas to Ohio that use its heavy crude were limited due to record high inventories. According to Genscape, total inventories were 26.5 million barrels at the end of April, equivalent to five weeks of the production currently offline. Several U.S. refiners that use Canadian crude said so far they did not see an impact in terms of deliveries. The U.S. imports about 3 million b/d of Canadian crude.

Reuters, 3:54 May 6, 2016

Reuters, 2:42 May 6, 2016

Reuters, 1:41 May 6, 2016

Reuters, 10:56 May 6, 2016

Reuters, 6:56 May 5, 2016

### **Fort McMurray Wildfire Knocks Out 29 Percent of Oil Sands-Supplied Power May 6**

Electricity flowing from plants at Canada's oil sands operations has decreased by nearly a third due to the Fort McMurray wildfire. Cogeneration plants that use the steam from Alberta's oil sands production were supplying 950 MW of power to the region at about 7 p.m. EDT on Thursday, electricity grid data compiled by Bloomberg showed, down 29 percent from three days ago. Natural gas output in the province has meanwhile dropped by a half-billion cubic feet a day since late April, data compiled by Bloomberg New Energy Finance showed. The cogeneration plant at Suncor Energy Inc.'s MacKay River oil sands complex was supplying 1 MW on Thursday, down from as much as 177 MW earlier in the week, data from the Alberta Electric System Operator showed. Flows from a 220 MW plant at a site run by CNOOC Ltd.'s Nexen that had been falling since the weekend reached zero on Thursday. Both companies are among those that have halted or curtailed production in the region. A shutdown at Royal Dutch Shell Plc's oil sands operations has also contributed to the declines.

[http://www.downstreamtoday.com/news/article.aspx?a\\_id=52061](http://www.downstreamtoday.com/news/article.aspx?a_id=52061)

## ***Electricity***

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### **Entergy's 653 MW Pilgrim Nuclear Unit 1 in Massachusetts Reduced to 50 Percent by May 6**

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

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

### **Update: Progress Energy's 872 MW Brunswick Nuclear Unit 1 in North Carolina Ramps Up to 91 Percent by May 6**

On the morning of May 5 the unit was operating at 36 percent, reduced from full power on May 4.

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

### **TVA's 1,126 MW Sequoyah Nuclear Unit 2 in Tennessee Reduced to 35 Percent by May 6**

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

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

### **Exelon's 855 MW Quad Cities Nuclear Unit 2 in Illinois Reduced to 87 Percent by May 6**

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

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

## **Update: STP's 1,251 MW South Texas Nuclear Unit 1 in Texas Restarts, Ramps Up to 13 Percent by May 6**

The unit shut from full power on May 1 due to a generator lockout.

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

<http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160502en.html>

## **Mountainview Power Company's 525 MW Gas-fired Unit 4 in California Shut by May 5**

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605051515.html>

## **NRC Says Regulators Used Wrong Information in Analysis at Entergy's 2,069 MW Indian Point Nuclear Plant in New York May 4**

The New York Attorney General reported that the Nuclear Regulatory Commission (NRC) ruled May 4 that its safety regulators used inaccurate information during an analysis at the Indian Point Nuclear Plant located in Buchanan, New York. NRC will need to conduct a new analysis after its regulators had material factual errors in an early analysis, which could be deemed as misleading data.

<http://www.capitalnewyork.com/article/albany/2016/05/8598411/nrc-reversesitself-accident-analysis-indian-point>

## ***Petroleum***

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### **Update: LyondellBasell Fails to Restart CDU at Its 263,776 b/d Houston, Texas Refinery May 6 – Sources**

LyondellBasell Industries' first attempt to restart the small crude distillation unit (CDU) at its Houston, Texas refinery failed overnight, Gulf Coast market sources said on Friday. Lyondell plans to again try to restart the 120,000 b/d Unit 536 CDU by early next week, said the sources. Unit 536 has been shut since April 11 to repair leaks in the attached 91,000 b/d vacuum distillation unit. The sources said Lyondell plans to keep Unit 536 at operating temperatures while continuing to prepare the CDU for the next restart attempt, which is expected within a few days. Once Unit 536 restarts, Lyondell plans to move the refinery's crude oil intake up to as high as 200,000 b/d. It has been as low as 85,000 b/d while the VDU on the large CDU was shut. The refinery restarted on Sunday the 91,000 b/d vacuum distillation unit attached to the 147,000 b/d Unit 537 CDU. The Unit 537 VDU was shut to repair leaks in piping. The Unit 537 CDU remained in operation at greatly reduced rates while the VDU was shut. A fire broke out on the refinery's 42,000 b/d coking unit on April 8. The coker is expected to be shut for at least three months to repair piping, which is thought to have failed, causing the fire. A 57,000 b/d coker remains in operation at the refinery.

Reuters, 3:22 May 6, 2016

### **PES Shuts Gasoline Desulfurization Unit at Its 335,000 b/d Philadelphia, Pennsylvania Refinery May 6 – Source**

Philadelphia Energy Solutions (PES) on Friday unexpectedly shut a gasoline desulfurization unit at its Philadelphia refinery, according to a source familiar with the situation.

Reuters, 2:51 May 6, 2016

### **Update: Motiva Completes FCCU Restart at Its 603,000 b/d Port Arthur, Texas Refinery May 5 – Sources**

Motiva Enterprises completed the restart of the 81,000 b/d fluidic catalytic cracking unit (FCCU) 3 at its Port Arthur, Texas refinery on Thursday morning, said sources familiar with plant operations. The unit was shut on April 27 for repairs following a malfunction.

Reuters, 8:13 May 5, 2016

### **Phillips 66 Reports Leak from Hydrocracker at Its 120,200 b/d Rodeo, California Refinery May 5**

Phillips 66 reported a small hydrogen leak from a hydrocracker at its Rodeo, California refinery, according to a filing with Contra Costa Health Services.

Reuters, 2:00 May 5, 2016

## **Shell Reports Flaring at Its Scotford, Alberta Facility May 5**

Royal Dutch Shell Plc reported flaring over the next 48 hours at its Scotford, Alberta facility, according to a community information phone line. The Scotford facility houses a 100,000 b/d refinery and a 255,000 b/d oil sands upgrader.

Reuters, 4:36 May 5, 2016

## **U.S. Oil Drillers Cut Rigs to 328 May 6 – Baker Hughes**

U.S. oil drillers cut rigs for a seventh week in a row to the lowest level since October 2009, Baker Hughes Inc. said Friday. Drillers cut four oil rigs in the week to May 6, bringing the total rig count down to 328, compared with 668 rigs operating a year ago.

Reuters, 1:05 May 6, 2016

## **Natural Gas**

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### **Update: Spectra, TETCO Says Some Physical Capacity through Its Delmont Compressor Station in Pennsylvania May Be Available Next Week Pennsylvania**

Spectra Energy Corp and Texas Eastern Transmission (TETCO) on Thursday said some natural gas capacity may be available to move next week through the Delmont compressor station on its Texas Eastern pipeline in western Pennsylvania after an explosion on April 29 damaged the 30-inch pipeline. TETCO has and continues to accept nominations for deliveries through Delmont, to the extent those deliveries can be accomplished by other operational means. Results from the soil testing to date indicate there are no contaminants from this incident in the soil. On April 29, an explosion damaged one of four parallel TETCO transmission lines in Salem Township, leading Spectra to isolate all four lines in the pipeline corridor and shut all flows through the Delmont Compressor Station. At the time of the explosion, Spectra said three of the four lines were operating. One line was down for maintenance. The compressor was not damaged. Before the explosion, about 1.3 Bcf/d of gas was moving through the impacted area.

<http://www.spectraenergy.com/announcements/>

<https://infopost.spectraenergy.com/infopost/default.asp?pipe=TE>

Reuters, 9:10 May 6, 2016

### **EIA Estimates Majority of U.S. Natural Gas Production Provided by Hydraulically Fractured Wells May 5**

The U.S. Energy Information Administration (EIA) estimates that natural gas production from hydraulically fractured wells makes up about two-thirds of total U.S. marketed gas production, and that by 2015, the number of hydraulically fractured wells grew to approximately 300,000 with production from those wells making up about 67 percent of the total natural gas output of the U.S.

<http://www.eia.gov/todayinenergy/detail.cfm?id=26112>

### **Update: PHMSA Reports Faults Procedures in Explosion at Williams Northwest Natural Gas Facility in Washington**

The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) released a report May 4 which found that the main cause of a March 2014 explosion at the Williams Northwest Pipeline facility in Plymouth, Washington, that injured six employees and caused tens of millions of dollars in damage, was inadequate procedures which allowed oxygen to remain in the system. The report also stated that details were lacking on what procedures to follow when a mix of oxygen and gas ignited, and did not address the piping configuration which allowed the oxygen to become trapped.

[http://www.phmsa.dot.gov/pv\\_obj\\_cache/pv\\_obj\\_id\\_98982CCB658FA8ABD35E75131426D883FEA14800/file\\_name/FIR\\_and\\_APPENDICES\\_PHMSA\\_WUTC\\_Williams\\_Plymouth\\_2016\\_04\\_28\\_REDACTED.pdf](http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_98982CCB658FA8ABD35E75131426D883FEA14800/file_name/FIR_and_APPENDICES_PHMSA_WUTC_Williams_Plymouth_2016_04_28_REDACTED.pdf)

<http://www.ktvz.com/news/regulators-fault-procedures-in-blast-at-washnatural-gas-facility/39384210>

### **Sabine Pipeline Reports Curtailment for Pressure Disruption at Sea Robin/Henry Hub Interconnect in Louisiana May 5**

Sabine Pipeline on Thursday reported pressures at the Sea Robin/Henry Hub interconnect are insufficient to make deliveries to Sabine and therefore, effective May 5, and until further notice, for Intraday 3 cycle, Sabine will no longer receive nominations for receipts into Sabine at the interconnect.

<http://www.gasnom.com/ip/sabine/index.cfm>

## Chesapeake Energy to Drill Additional Natural Gas Wells in Utica Shale in Ohio

Chesapeake Energy Corp said on Thursday it plans to drill more wells in the Utica shale basin over the next year or two, and could invest more in its Marcellus field as more pipelines are built. The Utica, located in eastern Ohio, is the nation's fastest growing shale gas play, and has more open pipeline access to the Gulf of Mexico area than the Marcellus, in Pennsylvania and West Virginia. Chesapeake said it produces about 1.8 Bcf/d in the Marcellus. Reuters, 5:57 May 5, 2016

## Other News

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Nothing to report.

## International News

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### Chevron Platform Shut after Attack by Militants in Nigeria's Niger Delta May 4

Chevron reported militants attacked its Okan offshore facility in Nigeria's oil-rich Niger Delta region late on Wednesday. The facility was shut-in but its exports were continuing while the situation was being assessed, according to the company. Resources have been deployed to respond to a resulting spill. A group known as the Niger Delta Avengers claimed responsibility for the attack, and in a statement said it blew up the platform.

<http://www.reuters.com/article/us-nigeria-oil-delta-idUSKCN0XW1PL>

## Energy Prices

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U.S. Oil and Gas Prices			
May 6, 2016			
	Today	Week Ago	Year Ago
<b>CRUDE OIL</b>			
<b>West Texas Intermediate U.S.</b>	44.53	45.93	60.88
\$/Barrel			
<b>NATURAL GAS</b>			
<b>Henry Hub</b>	2.05	1.89	2.76
\$/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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