



ENERGY ASSURANCE DAILY

Thursday Evening, May 19, 2016

Major Developments

Update: Fort McMurray Wildfire Continues to Grow, No Damage Expected at Oil Sands Facilities, Work Camp Evacuations Remain In Place May 19

Firefighters battling a wildfire that has threatened oil sands facilities north of Fort McMurray, Alberta looked to cooler weather, a change in winds, and the promise of rain to improve fire conditions on Thursday. A shift in wind direction from west to east is expected to push the fire back toward areas it has already burned, limiting its growth, a top wildfire official said, adding that no damage was expected to oil sands facilities on Thursday. Alberta government officials said the fire now covers approximately 505,645 hectares (nearly 1.25 million acres) up from about 423,000 hectares on Wednesday afternoon, and that mandatory evacuations for 19 work camps north of Fort McMurray remained in place. To date, none of the oil sands resources have caught fire, and industry has intensified efforts to ensure facilities are well-protected. Since May 4, Canadian oil sands companies shut approximately 1.07 million b/d of production. During the week ending Friday, May 13, some companies had restarted operations at significantly reduced capacity. The northern Alberta oil sands region normally produces roughly 2.2 million b/d and has more than 20 oil production operations clustered within a 60-mile radius of Fort McMurray, according to government data. The following list of companies details the most recent status update from impacted companies, which began on Wednesday, May 4. The red text indicates an update to the wildfire impacts reported in Wednesday's EAD publication.

- **Suncor Energy** said on Tuesday, May 17 that all personnel for its Base Plant and MacKay River operations will be relocated out of the region with the exception of a minimum number of emergency response and security workers required to close operations at Base Plant. Only the minimum number of essential personnel will staff the Firebag project, and personnel at the Fort Hills site have not been affected. On the evening of Monday, May 16 that the Province issued mandatory evacuations of its McKay River operation as well as the Borealis, Millennium, and Hudson lodges, which are located north of Fort McMurray and south of Fort McKay and provide lodging to industry workforces in the region. As a result, Suncor said it was moving its workers from those areas and that it had initiated a staged and orderly shutdown of its base plant operations. Suncor closed its 350,000 b/d Base Plant operations mining site, and its MacKay River and Firebag thermal oil sands operations on May 4. 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 maintenance turnaround.
- **Synchrude Canada** on **Thursday** extended force majeure on crude production, according to traders familiar with the matter. The company's customers were told to expect no further shipments for May. On Wednesday, May 18 the company said that its facilities north of the wildfire were intact. On Monday, May 16, the company said it was continuing to deploy employees to its Mildred Lake and Aurora oil sands sites to support restoration efforts. As of Sunday, May 15, several hundred employees were working to assess and ensure the safety of the sites; prepare for start-up by inspecting units and equipment; and commissioning the re-start of operations in a staged manner. Synchrude shut its 315,000 b/d Aurora bitumen mine by Saturday, May 7 while other projects were operating at minimal levels. A power generator was restarted at its Aurora bitumen mine by Tuesday, May 10. Synchrude is an oil sands project owned by a consortium of companies, including majority owner Suncor.
- **Shell Canada** said on **Thursday, May 19** that its Albion Sands operation remains safe and secure, and that the mandatory evacuation order north of Fort McMurray has not been extended to include its Albion Sands sites. On Tuesday, May 17, the company said its Albion Sands operations were not under an immediate threat from the wildfire, and that production continues at reduced rates. On Monday, May 9, the company restarted production at a reduced rate at its 255,000 b/d Albion oil sands mining operation, which include the Muskeg River and Jackpine oil sands mines. The company said it will fly staff in and out to help resume operations over the coming days and weeks.

- **Nexen (CNOOC Ltd)** said on Saturday, May 14 that its emergency response team had responded to a possible hydrogen sulfide gas leak at the company's Long Lake facility, which was reported by the Alberta Energy Regulator on Friday, May 13. All tests for hazardous gas have come back negative. The company performed an aerial site assessment on Thursday, May 12, which revealed main facility and surrounding well pads were intact, however the camp site had been destroyed. The Long Lake operation, which was shut on Wednesday, May 4, can produce approximately 50,000 b/d of synthetic crude but had been operating at reduced rates since late January due to an explosion at the plant.
- **ConocoPhillips** said on Friday, May 13 that the fire was 7.5 miles from its 30,000 b/d Surmont oil sands site, which is 39 miles southeast of Fort McMurray. The fire had not advanced since the morning of Thursday, May 12, but a webcam at the site revealed extremely smoky conditions. A spokesman said operations at the Surmont site will remain shut until the Alberta government allows workers to stay overnight at Surmont's camp. The Surmont site was shut and evacuated on Thursday, May 5.
- **Husky Energy** on Sunday, May 8 shut production at its 30,000 b/d Sunrise Energy Project. Husky had previously reduced operations to 10,000 b/d.
- **Connacher Oil and Gas Ltd** said on Thursday, May 5 it was restoring production at its Great Divide operation back up to 8,000 b/d, after cutting output to 4,000 b/d on Wednesday, May 4. The Great Divide operation, which is located 50 miles south of Fort McMurray, produced 14,000 b/d during the fourth quarter of 2015.
- **Canadian Natural Resources Ltd** said on Wednesday, May 18 that the wildfire continues to be a safe distance from its Horizon project with no threat to the health and safety of its staff or infrastructure. On Tuesday, May 17 that it was closely monitoring the forest fires and changing wind conditions in the Fort McMurray area with the health and safety of its teams as its first priority. The company said the fire continues to be a safe distance from its Horizon oils sands site and that operations were returning to stable conditions following minor upgrader repairs over the past weekend, which were unrelated to the fire. The company cut output by an unspecified amount at its Horizon project by Sunday, May 8. The Horizon project produced approximately 129,000 b/d of synthetic crude oil during the fourth quarter of 2015.
- **Statoil ASA** said late on Wednesday, May 18 that its Leismer oil sand project was producing at 9,000 b/d and would remain at that level while the company assesses the wildfire situation. On Friday, May 13 the company said it had initiated start-up of its Lesimer Project. Stat Oil said on Sunday, May 8 that it was suspending all production at its 20,000 b/d Leismer facility located south of Fort McMurray.
- **Athabasca Oil Corp** said on Thursday, May 5 that it evacuated and shut its Hangingstone project. The project was expected to produce 12,000 b/d by the fourth quarter 2016.
- **Imperial Oil Ltd** said on Sunday, May 8 that it completed a controlled shutdown of its Kearn oil sands mining project. The project was expected to produce 12,000 b/d by the fourth quarter 2016.
- **Cenovus** said on Tuesday, May 17 that its operations in northern Alberta were not affect by the wildfire activity that led to the precautionary evacuation of several oil facilities north of Fort McMurray. The company said its Christina Lak facility continues to operate with normal production and staffing levels, and that the southern edge of the wildfire was more than 40 miles north of the site. On Friday, May 6 the company said that essential staff were maintaining full production at its Christina Lake oil sands site. The company said it would return non-essential site staff beginning on Thursday, May 12.
- **MEG Energy and Japan Canada Oil Sands Ltd** said their operations near Fort McMurray were not affected.
- **Enbridge Inc** said on Monday, May 16 it was working with provincial firefighting crews to contain a fire near its Cheecham terminal. The existing firebreak around the terminal was being widened and its crew were assessing next steps in fire suppression tactics. Enbridge said some pipelines into and out of the terminal were operating, and it continues to monitor the situation very closely. On Friday, May 13 the company was working to restore operations to its Alberta pipeline network after fires halted the movement of an estimated 900,000 b/d of oil sands crude. The company resumed operations at its Cheecham terminal by the evening of Wednesday, May 11, which is located about 47 miles southeast of Fort McMurray and receives crude from production sites to be shipped on the Enbridge pipeline network. By the evening of Thursday, May 12, reports confirmed that the company was injecting volumes into its 550,000 b/d Waupisoo pipeline (Line 18) and its 570,000 b/d Athabasca pipeline (Line 19), which transport crude south from the Cheecham terminal to the Edmonton and Hardisty markets, respectively.
- **Inter Pipeline** said late on Wednesday, May 18 that it had safely resumed operations on the Polaris and Corridor pipeline systems, and that it continues to monitor the situation while working with its customers. The company confirmed on Tuesday, May 17 that operations on Polaris and Corridor pipeline systems were partially shut down as a proactive measure due to the on-going fires around Fort McMurray. On Wednesday, May 4, the company shut its 346,000 b/d Corridor pipeline system and a section of its 540,000 b/d Polaris diluent pipeline system near Fort McMurray. The company resumed operations on the Polaris

pipeline system on Thursday, May 5, and said that the Corridor system was ready to restart as soon as Shell's oil sands site restore production.

- **Pembina's** Algar to Cheecham Lateral remains fully operational as of Thursday, May 5, but was 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 did not expect the wildfire to affect deliveries of natural gas. The nearest pipeline was about 12 miles west of the current wildfire.

Reuters, 10:57 May 19, 2016

<http://www.alberta.ca/premier.cfm>

<http://fingfx.thomsonreuters.com/gfx/rngs/1/1706/2971/index.html>

<http://www.suncor.com/fort-mcmurray-fires>

<http://www.syncrude.ca/our-news/syncrude-insights/2016/syncrude-continues-to-implement-safe-restart-plan/>

<http://www.shell.ca/en/aboutshell/employee-help-site.html>

<http://www.nexencnooltd.com/en/AboutUs/MediaCentre/FortMcForestFires.aspx>

<http://www.conocophillips.ca/newsroom/Pages/Fort-McMurray-Fire.aspx>

http://www.cnrl.com/upload/media_element/1011/07/may-18-2016-public-statement-fort-mcmurray-forest-fires.pdf

<https://twitter.com/StatoilASA/status/731200671542706176>

<https://www.atha.com/news/releases.html>

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

<http://www.cenovus.com/news/news-releases/2016/20160504-Fort-McMurray-fire-response.html>

<http://www.enbridge.com/wildfires-in-fort-mcmurray>

<http://www.interpipeline.com/ourresponsibility/communityinvestment/fort-mcmurray-fires.cfm>

<http://www.pembina.com/media-centre/news-releases/>

Update: Alberta Oil Sands Cogeneration Capacity Remains Steady at 433 MW May 19 – AESO

Cogeneration electric plants' output around Fort McMurray in Alberta, Canada held mostly steady Thursday morning versus Wednesday afternoon, the Alberta Electric System Operator (AESO) said. Total cogeneration production around Fort McMurray edged up to 433 MW on Thursday morning from 421 MW Wednesday afternoon. There is 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. Since the fires started on May 1, generators have shut Suncor's 197 MW MacKay River on May 4, the 510 MW Syncrude plant on May 7, Imperial's 84 MW Kearl, Suncor's 473 MW Firebag by May 8, Suncor's 50 MW Base, TransAlta's 376 MW Poplar Creek and Firebag again by May 17, according to the AESO. The Syncrude plant returned to service on May 10 and Kearl and Firebag on May 13 and Firebag again by May 18.

Reuters, 7:48 May 19, 2016

Electricity

Update: PPL's 1,111 MW Susquehanna Nuclear Unit 2 in Pennsylvania at Full Power by May 19

On the morning of May 18 the unit was operating at 84 percent, after restarting and ramping up to 17 percent on May 17. The unit was shut from full power on Friday, May 13, due to a fault in one of the unit's 480-volt electrical distribution centers. An investigation determined the reason for the shutdown was a short in a breaker that supplies power to a ventilation fan, the company said

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

<http://finance.yahoo.com/news/susquehanna-unit-2-reconnected-power-113400263.html>

FPL's 693 MW Turkey Point Nuclear Unit 4 in Florida Reduced to 50 Percent by May 19

On the morning of May 18 the unit was operating at full power.

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

DTE's 1,089 MW Fermi Nuclear Unit 2 in Michigan Reduced to 80 Percent by May 19

On the morning of May 18 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 84 Percent by May 19

On the morning of May 18 the unit was operating at full power.

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

Update: AES's 496 MW Redondo Gas-fired Unit 8 in California Returns to Service by May 18

The unit returned from an unplanned outage that began on May 17.

<http://content.caiso.com/unitstatus/data/unitstatus201605181515.html>

AES's 175 MW Alamos Gas-fired Unit 1 in California Shut by May 18

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605181515.html>

AES's 336 MW Alamos Gas-fired Unit 4 in California Shut by May 18

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605181515.html>

AES's 498 MW Alamos Gas-fired Unit 5 in California Shut by May 18

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605181515.html>

AES's 495 MW Alamos Gas-fired Unit 6 in California Shut by May 18

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605181515.html>

Solar Partners VIII's 133 MW Ivanpah Solar Unit 3 in California Shut by May 18

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605181515.html>

Luz Solar Partners' 175 MW Aggregate Solar Units 3-7 in California Shut by May 18

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605181515.html>

CAISO Says Natural Gas Shortages Threaten Southern California Summer Power Reliability

The California Independent System Operator (CAISO), operator of the California power grid, said on Wednesday that natural gas shortages related to a leak at Southern California Gas Co.'s 86 Bcf Aliso Canyon storage facility will threaten electric reliability in the southern part of the state this summer. The rest of the state, however, should have enough electricity to meet summer air conditioning demand, CAISO said. In April, several California agencies prepared a report on potential power shortages related to last year's gas leak at the Aliso Canyon storage facility in the Los Angeles area. That report found significant risks to electricity deliveries due to the ongoing shutdown of Aliso Canyon, potentially leading to 14 days of power outages in Southern California. Outside of Southern California, the ISO said its summer assessment found supplies will be adequate under typical state summer weather conditions. There should be about 54,459 MW of generating capacity available this summer, the ISO said, up about 1,951 MW from June 1, 2015. Demand, meanwhile, is expected to peak at about 47,529 MW this summer. In 2015, the summer peak was 47,257 MW on September 10. The ISO's all-time summer peak was set on July 24, 2006 at 50,270 MW.

<http://www.caiso.com/Documents/CaliforniaISOREleasesReportOnSummerElectricitySupplies.pdf>

http://www.downstreamtoday.com/news/article.aspx?a_id=52218

Petroleum

Valero Reports Process Unit Upset at Its 335,000 b/d Port Arthur, Texas Refinery May 18

Valero Energy Corp reported a process unit upset resulted in excess emissions at its Port Arthur, Texas refinery on Wednesday, according to a filing with the Texas Commission on Environmental Quality.

Reuters, 17:34 May 18, 2016

Update: FCCU at ExxonMobil's 149,500 b/d Torrance, California Refinery Running at 75 Percent May 19 – Source

A fluid catalytic cracking unit (FCCU) at ExxonMobil's Torrance, California refinery was running at 75 percent due to repairs on one of its compressors, a source said on Thursday. The repairs are expected to last up to 30 days, the source said. The FCCU was shut on February 18 following an explosion. The refinery must be in working condition for ExxonMobil to transfer ownership of the facility to PBF Energy by the end of the second quarter.
Reuters, 12:24 May 19, 2016

Canadian NEB Conditionally Recommends Kinder Morgan's 890,000 b/d Trans Mountain Pipeline Expansion Project May 19

Canada's National Energy Board recommended the government approve Kinder Morgan's Trans Mountain pipeline expansion project on Thursday, subject to 157 conditions. The proposed expansion project would nearly triple the capacity of the 300,000 b/d crude oil pipeline, which runs from Alberta to Canada's Pacific Coast, to 890,000 b/d.
Reuters, 16:13 May 19, 2016

<http://www.kindermorgan.com/business/canada/transmountain.aspx>

<http://www.kindermorgan.com/pages/business/canada/tmep.aspx>

Natural Gas

ExxonMobil Reports Unit Down at Its 65 MMcf/d Dollarhide Gas Plant in Texas May 18

ExxonMobil reported the Wauk-3 unit was down on low engine coolant level. The coolant was found to be leaking from the engine block and mechanics found a bad engine head. While the unit is awaiting parts, field operations closed in some wells to mitigate flaring.

<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=233429>

Other News

EPA Proposes Increase in Renewable Fuel Targets under Its RFS Program May 18

The U.S. Environmental Protection Agency (EPA) on Wednesday proposed increases in renewable fuel volume requirements across all types of biofuels under the Renewable Fuel Standard (RFS) program. The proposed increases would boost renewable fuel production and provide for ambitious yet achievable growth, EPA said. Total renewable fuel volumes would grow by nearly 700 million gallons between 2016 and 2017. Advanced renewable fuel—which requires 50 percent lifecycle carbon emissions reductions—would grow by nearly 400 million gallons between 2016 and 2017. The non-advanced or “conventional” fuels portion of total renewable fuels—which requires a minimum of 20 percent lifecycle carbon emissions reductions—would increase by 300 million gallons between 2016 and 2017 and achieve 99 percent of the Congressional target of 15 billion gallons. Biomass-based biodiesel—which must achieve at least 50 percent lifecycle emissions reductions—would grow by 100 million gallons between 2017 and 2018. Cellulosic biofuel—which requires 60 percent lifecycle carbon emissions reductions—would grow by 82 million gallons, or 35 percent, between 2016 and 2017. The Clean Air Act requires EPA to set annual RFS volume requirements for four categories of biofuels. By displacing fossil fuels, biofuels help reduce greenhouse gas emissions and help strengthen energy security. EPA is proposing to use the tools provided by Congress to adjust the standards below the statutory targets, but the steadily increasing volumes in the proposal continue to support Congress's intent to grow the volumes of these important fuels that are part of the nation's overall strategy to enhance energy security and address climate change.

<https://www.epa.gov/newsreleases/epa-proposes-increase-renewable-fuel-levels-0>

<https://www.epa.gov/renewable-fuel-standard-program/proposed-renewable-fuel-standards-2017-and-biomass-based-diesel>

Update: ExxonMobil Says Nigeria's Qua Iboe Production 'Ongoing' Despite Blocked Access to Terminal in Nigeria May 19 – Traders; Oil Cargoes Delayed 8–15 Days for May, June

ExxonMobil said production was 'ongoing' at Nigeria's Qua Iboe crude oil terminal despite 'criminal' activity that obstructed staff access to a bridge leading to the terminal in the early hours of Thursday. ExxonMobil cut Qua Iboe production and declared force majeure on exports on May 13, after a drilling rig experienced mechanical difficulties that damaged the pipeline it jointly owns with the state-owned Nigerian National Petroleum Corporation (NNPC). Production was ramped up again on Wednesday although cargoes of the crude oil for May and June will be deferred by 8 to 15 days, a revised export schedule showed on Thursday. Qua Iboe is Nigeria's most marketable crude oil stream and monthly exports usually amount to more than 300,000 b/d.

Reuters, 12:42 May 19, 2016

Reuters, 7:18 May 19, 2016

Colombia's Ecopetrol Halts Pumping on Its 210,000 b/d Cano-Limon Covenas Pipeline after Rebel Bomb Attack May 17

Colombian state-run oil company Ecopetrol on Tuesday halted pumping on the 485-mile Cano-Limon Covenas pipeline after a bombing attributed to the ELN rebel group sent crude spilling into a river. The attack occurred in Saravena municipality in Arauca province, near the border with Venezuela, and is the 14th such attack this year, Ecopetrol said. Oil exports were proceeding as normal, the company said. The government and the ELN announced in March they would soon begin formal peace talks in Ecuador after over two years of preliminary negotiations. Cano-Limon transports crude from oil fields operated by Occidental Petroleum to the Caribbean port of Covenas.

http://www.downstreamtoday.com/news/article.aspx?a_id=52223

Update: Tanker Begins Delayed Oil Loading at Libya's Hariga Port May 19 – Officials

A tanker that had been blocked for three weeks in a stand-off over oil exports at the eastern Libyan port of Marsa al-Hariga entered the port and began loading on Thursday, officials said. The Seachance, which had been waiting to load oil for Glencore on behalf of the Tripoli-based National Oil Corporation (NOC), was loading 600,000 barrels for shipment to Britain, port and oil officials said. Exports from Hariga have been blocked since early this month due to a dispute between competing eastern and western branches of the NOC. The blockage reduced production from the eastern Messla and Sarir fields, lowering Libya's output to around 200,000 b/d, a significant drop from the 1.6 million b/d the country was producing before the toppling of leader Muammar Gaddafi in 2011. The heads of the two NOC branches reached an agreement in principle to resume shipments at talks held in Vienna, Austria, last weekend. If further shipments are allowed to leave Hariga Libya could quickly raise its output to more than 300,000 b/d.

Reuters, 7:21 May 19, 2016

Energy Prices

U.S. Oil and Gas Prices			
May 19, 2016			
	Today	Week Ago	Year Ago
CRUDE OIL			
West Texas Intermediate U.S.	48.11	46.59	57.29
\$/Barrel			
NATURAL GAS			
Henry Hub	1.91	2.01	3.01
\$/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.

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