



ENERGY ASSURANCE DAILY

Tuesday Evening, May 17, 2016

Major Developments

Update: Mandatory Evacuations Issued to Suncor, Syncrude as Wildfire Reemerges North of Fort McMurray May 17 – Alberta Premier

A massive wildfire burning around the Canadian oil sands hub of Fort McMurray was growing and moving rapidly north late on Monday, forcing firefighters to shift their focus to protecting major oil sands facilities north of the city, and forcing the evacuation of about 8,000 non-essential workers, officials said. Oil sands companies around Fort McMurray had in recent days been flying in workers and moving towards restarting production. Alberta Premier Rachel Notley announced on Tuesday, May 17, that mandatory evacuations were issued late on Monday to all industry work camps north of Fort McMurray and south of Fort McKay, primarily affecting Suncor Energy and Syncrude Canada workforces. Reports indicate that the wildfire is 10 to 15 miles south of the two companies' production facilities. Notley added that the firebreak protection line was holding strong around Enbridge's Cheecham terminal, located about 44 miles southeast of Fort McMurray, and that conditions had improved on Tuesday with winds blowing to the east away from the facility. On Monday, Notley said the fire was about 1 kilometer (about 0.6 miles) from the Enbridge facility's firebreak. The Cheecham terminal, which typically handles around 900,000 b/d, is a major hub for oil sands crude takeaway pipelines from Fort McMurray. After anticipating a very active "fireday" on Monday, Notley confirmed the Fort McMurray fire grew by nearly 25 percent to approximately 355,000 hectares (about 877,225 acres) from 285,000 hectares previously. 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 Monday's EAD publication.

- **Suncor Energy** said 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 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.
- **Syncrude Canada** said on Monday, May 16 that 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. Syncrude 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. Syncrude is an oil sands project owned by a consortium of companies, including majority owner Suncor.
- **Shell Canada** said on Tuesday, May 17 that its Albian 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 Albian 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 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 on Friday, May 13 that it had initiated start-up of its Lesimer Project. The company hopes to increase manpower and restore production to typical levels during the week ending Friday, May 20. Statoil 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 Kearl oil sands mining project. The project was expected to produce 12,000 b/d by the fourth quarter 2016.
- **Cenovus** said on Friday, May 6 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** 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, 12:05 May 17, 2016

Reuters, 23:52 May 16, 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/1011/06/may-17-2016-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 Decreases to 360 MW May 17 as Wildfire Shifts Forcing New Evacuations, Closures – AESO

Cogeneration electric plants around Fort McMurray shut down as wildfires moved and oil sands producers evacuated facilities, the Alberta Electric System Operator (AESO) said on Tuesday. Suncor Energy said on Monday night that its 197 MW MacKay River oil sands facility was under a mandatory evacuation order. Suncor shut its 50 MW Base and 473 MW Firebag cogeneration units by early Tuesday, while TransAlta Corp closed the 376 MW Poplar Creek plant, which serves Suncor's Base Operations oil sands facility, the AESO said. Previously, Firebag had shut by May 8 and returned to service by May 13. The Base Operations and Poplar Creek plants had continued to operate at low power until at least Monday afternoon. With the recent shutdowns, total cogeneration production around Fort McMurray fell to 360 MW on Tuesday morning from 550 MW on Monday 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 on May 1, the Fort McMurray units were producing about 1,300 MW, according to local media reports. Generators shut the MacKay River plant on May 4, the 510 MW Syncrude plant on May 7 and the 84 MW Kearn plant by May 8, according to the AESO. The Syncrude plant returned to service on May 10, and Kearn on May 13.

Reuters, 8:29 May 17, 2016

Electricity

Huntsville Utilities Reports Brief Power Outage to Over 11,000 Customers in Alabama May 17

Huntsville Utilities on Tuesday afternoon reported 11,717 customers experienced a brief outage in the North Huntsville area. Power was fully restored within an hour and the utility said the cause was unknown at this time.

<https://www.hsvutil.org/outagemap/>
<https://www.facebook.com/Huntsville.Utilities/>

Update: Talen Energy's 1,111 MW Susquehanna Nuclear Unit 2 in Pennsylvania Restarts, Ramps Up to 17 Percent by 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>

DTE's 1,089 MW Fermi Nuclear Unit 2 in Michigan Reduced to 73 Percent by May 17

On the morning of May 16 the unit was operating at 86 percent.

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

Solar Partners II's 123 MW Ivanpah Solar Unit 1 in California Shut by May 16

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605161515.html>

Solar Partners VIII's 133 MW Ivanpah Solar Unit 3 in California Shut by May 16

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201605161515.html>

BHE Renewables' 276 MW Solar Star Unit 2 in California Shut by May 16

The unit entered an unplanned outage.

<http://content.aiso.com/unitstatus/data/unitstatus201605161515.html>

NRC Issues Low Safety Violation to NextEra's 1,155 MW Seabrook Nuclear Power Plant in New Hampshire May 15

The Nuclear Regulatory Commission (NRC) on May 15 issued a "very low safety significance" level violation to NextEra Energy's Seabrook nuclear power plant in New Hampshire following a March 24 inspection at the facility. According to the letter sent to Seabrook by the NRC, the issue involved does not indicate the plant is unsafe. However, the inspection revealed that initial and prompt operability determinations were not conducted by employees when additional information was identified in relation to the effects of alkali-silica reactions on safety-related concrete structures. The plant remains open and fully operational.

http://www.newburyportnews.com/news/local_news/n-plant-cited-for-reactionto-concrete-problem/article_9a760104-f305-56f4-a447-afa6d9e7cdf4.html

NRC Issues Low Safety Violation to Exelon's 619 MW Oyster Creek Nuclear Power Plant in New Jersey May 15

The Nuclear Regulatory Commission (NRC) on May 15 reported that its March 31 inspection at Exelon's Oyster Creek nuclear power plant in New Jersey revealed several low-level violations. These included a licensee-identified violation and a "White" violation which disclosed that the plant did not appropriately provide procedures or instructions for maintenance on the emergency diesel generator cooling water system.

<http://patch.com/new-jersey/lacey/nrc-oyster-creek-emergency-diesel-generator-cooling-system-failed-during-test-due-aging-hose>

Goldwind Americas Acquires 160 MW Rattlesnake Wind Project from RES in Texas May 17

Goldwind Americas, a subsidiary of Xinjiang Goldwind Science & Technology, announced today that it signed an agreement with Renewable Energy Systems Americas Inc. (RES) to acquire the 160 MW Rattlesnake Wind Project located in McCulloch County, Texas. The project, located approximately 125 miles northwest of Austin, will utilize 64 Goldwind 2.5 MW Permanent Magnet Direct-Drive (PMDD) wind turbines. The project represents the first phase of an expected 300 MW wind project, which was developed and will be constructed under a Balance of Plant agreement by RES.

<http://www.goldwindamericas.com/goldwind-americas-signs-160-mw-texas-deal-res>

Petroleum

Update: LyondellBasell Expects to Restart Coker at Its 263,776 b/d Houston, Texas Refinery by Mid-June – Sources

A coking unit at LyondellBasell Industries' Houston, Texas refinery is expected to restart between late May and mid-June for the first time since being damaged in an April 8 fire, Gulf Coast market sources said on Monday. The refinery is expected to reach a crude oil intake of 200,000 b/d this week for the first time since April 15, the sources said. A Lyondell spokeswoman said the company expects the coker to return to production by the end of the second quarter of this year. The coker was one of four units shut between April 8 and 15 in a string of unit outages and accidents at the refinery that forced production down to 85,000 b/d. Between May 1 and May 8, Lyondell restarted the small crude distillation (CDU) and two vacuum distillation units, which were shut due to leaks. The large CDU remained in operation, though at reduced throughput. The 42,000 b/d coker is undergoing repairs from the fire and to piping refinery officials believe had suffered extensive corrosion during at least two decades of use, the sources said. The wall of the pipe that ruptured igniting the April 8 fire was said by the two sources to have been very thin due to abrasion and corrosion from the petroleum coke passing through it. There are two cokers at the refinery. The 57,000 b/d coker remains in operation. The refinery has ordered over 1,000 feet of Chrome-Moly pipe to replace piping on the shut coker, the sources said. Chromium and molybdenum would make the coker piping more resistant to corrosion than the piping that failed, the sources said.

Reuters, 15:57 May 16, 2016

Marathon Shuts Multiple Units at Its 130,000 b/d Detroit, Michigan Refinery Due to Power Outage May 17 – Source

Marathon Petroleum Corp shut multiple units, including a fluid catalytic cracking unit, at its Detroit, Michigan refinery on Tuesday morning due to power outage, according to a source familiar with refinery operations. The company was forced to shut the entire refinery, according to a report by Industrial Info Resources, but was restarting the units. Energy industry intelligence service Genscape first reported that several units were shut down at the Detroit refinery due to suspected operational issues. A company representative declined to comment on the matter, citing a policy of not discussing operational issues.

Reuters, 10:05 May 17, 2016

Citgo Reports Operational Upset at Its 157,500 b/d Corpus Christi East, Texas Refinery May 16

Citgo Petroleum Corp said during an apparent temporary operational upset, the fluid catalytic cracking unit (FCCU) experienced an opacity spike and emissions were reported, according to a filing with the Texas Commission on Environmental Quality.

Reuters, 17:03 May 16, 2016

Plains All American Indicted in 2015 Santa Barbara, California Oil Spill

Plains All American Pipeline on Tuesday said it and one of its employees were indicted on 46 counts of California state law violations in the May 19, 2015 oil spill that released more than 140,000 gallons of crude oil across the Santa Barbara coastline and into the ocean. Initial investigations found the 24-inch underground Line 901 pipeline was severely corroded where it ruptured. Tests on the pipe had been conducted weeks before the spill, but the results had not been analyzed before the incident occurred. Plains said the spill was an accident and believes no criminal behavior took place. The spill was blamed for the deaths of more than 300 animals and sent tar balls drifting more than 100 miles away to Los Angeles beaches. Plains said 10 counts relate to the spill and the incident reporting process to authorities, and 36 relate to dead wildlife. The company also faces an investigation into the cause of the spill by federal regulators.

<http://ir.paalp.com/profiles/investor/ResLibraryView.asp?ResLibraryID=81633&GoTopage=1&Category=117&BzID=789&G=549>

Reuters, 12:01 May 17, 2016

TransCanada to Replace Sections of Its Keystone Oil Pipeline to Meet PHMSA Strength Standards

TransCanada Corp. this month plans to dig up and replace sections of its 30-inch Keystone pipeline in Nebraska, South Dakota, Kansas, Illinois and Missouri, which were found to not meet federal strength standards. An investigation by the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA) of seven pipelines found that between 2007 and 2009 a number of pipe mills made substandard steel pipe for pipeline companies. Those pipes failed to meet government strength standards and could potentially deform under stress causing a leak. Consequently, PHMSA issued an advisory warning pipeline companies of the defective materials. TransCanada did an in-line inspection of Keystone that found the pipeline to be safe, but did identify some areas that would need to be replaced based on post-construction guidelines for low yield strength. The work must be completed before TransCanada can operate the Keystone at the higher operating pressure to ship more volume. Keystone will be shut down for short periods, typically 24 hours and no more than twice in a four-week period, to replace the 9 to 40 feet long sections. The work is expected to extend through 2017.

http://journalstar.com/news/state-and-regional/nebraska/transcanada-to-replace-sections-of-keystone/article_4974f746-ae0-5078-8a82-dbe1920e932c.html

Constitution Appeals NYSDEC's Permit Denial for Its 125-Mile Natural Gas Transmission Pipeline May 16

Constitution Pipeline Company, LLC on Monday announced it appealed the New York State Department of Environmental Conservation's (NYSDEC) refusal to grant the company's request for a Water Quality Certification under the Clean Water Act for its 125-mile natural gas pipeline project stretching from Pennsylvania to the northeastern U.S. The water permit is the final regulatory hurdle for the project. The company also filed an action with the U.S. District Court for the Northern District of New York seeking a declaration that the State of New York's authority to exercise permitting jurisdiction over certain other environmental matters is preempted by federal law. The 125-mile pipeline project is proposed to connect domestic natural gas production in northeastern Pennsylvania with northeastern markets during the second half of 2017

<http://constitutionpipeline.com/constitution-pipeline-challenges-decision-by-new-york-state-to-block-federally-approved-pipeline/>

<http://constitutionpipeline.com/>

Reuters, 19:54 May 16, 2016

Other News

Nothing to report.

International News

Update: Libya's Rival NOCs Agree on Unified Oil Structure, Hariga Port Oil Shipments to Resume – Foreign Minister, Sources

Libya's rival National Oil Corporations (NOCs), which represent the east and west divisions of the country, have agreed in principle to have one national oil organization, the foreign minister in the new U.N.-backed, national unity government said on Tuesday. Libya will resume oil shipments, which have been blocked since early May, from the port of Marsa El Hariga after the agreement was reached in Vienna, Austria, Libyan oil sources told Reuters. Oil production was at more than 300,000 b/d before the blockade more than halved output from two major eastern oil fields. The east NOC in Benghazi, which is loyal to Libya's eastern government, has prevented the loading of a tanker sent by the NOC in Tripoli, since the former tried unsuccessfully last month to export a cargo of crude for the first time. The west NOC in Tripoli, which is keen to work with a new U.N.-backed unity government to revive Libya's oil production, said the standoff was costing Libya \$10 million a day, and warned that storage tanks at the port would be full within weeks if no deal was reached. The east NOC in Tripoli plans to charter a tanker later this week to load 400,000 barrels of Messla and Sarir crude at Hariga and deliver to the 120,000 b/d Zawia refinery in western Libya, an official from Tripoli said.

http://www.downstreamtoday.com/news/article.aspx?a_id=52187

http://www.rigzone.com/news/oil_gas/a/144550/Libyan_Factions_Agree_In_Principle_On_Unified_Oil_Structure#thash.66bTqPHb.dpuf

Nigeria Braces for New Round of Fuel Shortages as Oil Cargo Backlog Continues

At least 75 ships with 2.5 million tons of diesel and gasoline are waiting for importers in Nigeria to find the dollars they need to pay for the cargoes. Some of the vessels arrived a month ago and started to offer their fuel to buyers outside Nigeria, several traders told Reuters. A slump in world oil prices has hit Nigeria's state income and because crude sales are the government's main source of revenue and the oil price collapse has caused crippling shortages of dollars within the economy. In a bid to break the impasse and head off more fuel shortages, the government raised the price cap for gasoline by 67 percent, officially sanctioned importers to use the black market to find the hard currency they need to get cargoes off the ships, and allowed any Nigerian company to import fuel. Nigeria has four refineries but decades of neglect has forced it to import most of its refined fuel. Nigeria consumes roughly 280,000 b/d of gasoline and its crude production dropped this month to 1.65 million b/d from 2.2 million b/d.

<http://www.hydrocarbonprocessing.com/Article/3554748/Latest-News/Nigeria-braces-for-new-round-of-fuel-shortages.html>

Energy Prices

U.S. Oil and Gas Prices			
May 17, 2016			
	Today	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate U.S. \$/Barrel	48.24	44.63	59.37
NATURAL GAS Henry Hub \$/Million Btu	1.91	1.97	2.87

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

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

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