Oil and Gas News Briefs Compiled by Larry Persily May 30, 2017

Greens reach deal to help govern B.C.; oil and gas impacts unknown

(Reuters; May 29) - British Columbia's minority Green Party has struck a deal with the left-leaning New Democrats to govern Canada's western-most province, a move that casts doubt on the future of key oil and gas projects. Announcement of the partnership May 29 ends a stalemate that emerged last week when the final tally of votes from the May 9 provincial election stripped Premier Christy Clark of her more pro-development, pro-business majority of legislative assembly seats.

Green Party leader Andrew Weaver did not reveal what the political pact says about Kinder Morgan's plans to expand its Trans Mountain oil pipeline from Alberta to the British Columbia coast. Both the Greens and NDP have opposed the project. Clark had backed Trans Mountain's pipeline, as well as liquefied natural gas export projects. Any move by the new government to block Kinder Morgan will be a blow to federal Canadian Prime Minister Justin Trudeau, whose government approved the project last November.

Trudeau says the Alberta energy industry needs the pipeline to boost exports to Asia and reduce reliance on U.S. buyers. Opponents say risks of spills are too large. While there is some dispute whether British Columbia can formally block the line, it can raise multiple hurdles such as denying construction permits that could make it impossible to build. The deal between the Greens and New Democrats still needs to be voted on May 30. A minority government would be the province's first in 65 years. The Greens and the New Democrats together have 44 of the 87 seats in the provincial legislature.

Company will start work on oil sands pipeline expansion this fall

(Financial Post; Canada; May 25) - Kinder Morgan is forging ahead with its Trans Mountain oil sands pipeline expansion project despite a political climate the company said is "not ideal." Kinder Morgan announced May 25 it had made its final investment decision and would start work this fall on the controversial \$7.4 billion project to move more oil between Albert and the B.C. coast. It also said that it would conclude an initial public offering of stock, spinning out Kinder Morgan Canada, by the end of May.

The company said it made the decision now because shipping agreements with oil companies specified the company needed to have financing in place and a sanctioning decision by May 31. Kinder Morgan said "the political climate was not ideal," but the company decided to proceed as a result of the financing obligations. This month's

provincial elections are likely to give the Green Party a role in a new coalition government in British Columbia, adding uncertainty to resource development projects.

The pipeline expansion is expected to be in service by the end of 2019 and will boost the system's capacity by 590,000 barrels of oil per day. To finance the project, Kinder Morgan had initially sought partners but elected to spin out its Canadian subsidiary through an initial public offering, which will take place in the coming days and is expected to raise \$1.75 billion.

Russian LNG developer making plans for its second export project

(LNG Journal; May 26) - Planning is continuing for the proposed Arctic LNG-2 project in Siberia to start development after Yamal LNG comes on stream in the Russian Arctic at the end of 2017, with global energy engineering company TechnipFMC likely to play a prominent role. The Arctic LNG-2 venture is led by the Yamal developer, Russian gas producer Novatek, and likely would be located offshore in Ob Bay near the remote Gydan Peninsula in Northwest Siberia, just to the east of the Yamal development.

Technip is one of the contractors on the \$27 billion Yamal LNG project, Russia's second LNG export plant. (The first has operated since 2009 on Sakhalin Island in the Far East). Novatek has said it intends to learn from its work at Yamal and develop the Arctic LNG-2 project at a lower cost. The feed gas would come from the Salmanovskoye field with proved reserves of 13.4 trillion cubic feet, the company said. Yamal LNG is an onshore project; Arctic LNG-2 would be built on floating platforms.

Tanzania gas project faces deepwater production challenges

(Oxford Business Group; London; May 26) - A proposed liquefied natural gas export project in Tanzania is moving forward, though it faces a long timeline and regional competition for investment dollars from Mozambique. Tanzania hopes to reach a host-government agreement with its industry partners, setting out foreign investor obligations and state-owned Tanzania Petroleum Development Corp.'s role by the end of 2018.

While the agreement would be a crucial step toward the LNG project, the complexity of the natural gas development suggests it could take some time to get under way. It will take time to ensure ample feedstock for the LNG plant because of the complexity of producing from the country's gas fields. The bulk of Tanzania's offshore deposits are deepwater, being found at depths of 3,300 to 8,200 feet, beyond a steep drop-off in the continental shelf and more than 60 miles from shore.

Oystein Michelsen, Statoil's country manager for Tanzania, said last winter that a final investment decision was at least five years out, and that construction could take an

additional five years. In addition to Statoil, partners in a Tanzania project could include ExxonMobil, Shell and Singapore's Pavilion Energy. "We are still in the early stages of understanding how to overcome the topography, which involves deep canyon systems at those water depths; it is technically very challenging and will require innovative engineering solutions," said Mark Fraser, managing director of ExxonMobil Tanzania.

Korea's turn toward cleaner energy will help LNG, but add costs

(Nikkei Asian Review; May 28) – Some 20 wind turbines spin at the Sinchang Wind Power Complex, off the western coast of Jeju, South Korea's popular resort island. The turbines, run by a subsidiary of Korea Electric Power, are part of a project to make the island, which is serving as a test for advanced energy technologies, carbon-free by 2030. It is part of a broader effort by state-owned KEPCO to double its capacity in the renewables sector to 11 percent of the company's generation capacity by 2029.

The government of President Moon Jae-in is setting an even more ambitious target for renewables. It wants 20 percent of the country's electricity to come from green sources by 2030 to reduce South Korea's dependence on nuclear reactors and coal. Moon has already ordered the temporary suspension in June of 10 coal-powered plants that are at least 30 years old before shutting them down completely by the end of his term in 2022. The action is in response to increased air pollution and a search for cleaner energy.

Reduced dependence on nuclear and coal, however, will mean that KEPCO will have to rely more on liquified natural gas to generate power, squeezing profits. "The Moon Jaein government's policy to cut coal-powered generation and increase LNG generation has been weighing on KEPCO's stock price recently because of worries over higher fuel costs," said Shon Ji-woo, an analyst at SK Securities. "Investors are concerned that generation from expensive LNG will increase while that from cheap coal will diminish."

Indonesia could become net gas importer by 2020

(International Business Times; May 29) - Fitch Group's BMI Research said Indonesia is projected to become a net importer of liquefied natural gas by 2020, with an estimated annual import growth rate of 4 percent over the next 10 years. This is amid increasing demand and dwindling output at mature gas fields. The Jakarta Post reported the biggest demand is coming from the power generation sector. Even with more imports to meet local needs, Indonesia would continue with its 40-year history of LNG exports.

With declining gas production and increasing demand from domestic customers, Indonesia exported 3.9 million metric tons of LNG in the first quarter of the year, a drop of 7.5 percent year-on-year and down 15 percent from the five-year average. Indonesia was one of the world's early LNG producers, starting up its first liquefaction plant in

1978. Gas production totaled more than 3 trillion cubic feet in 2010, but has declined every year since then, falling several hundred million cubic feet a day by 2016.

Even with reduced output, Indonesia was the fifth-largest LNG exporter in the world in 2015, at 770 billion cubic feet of gas, about 16 million metric tons of LNG.

LNG could fuel power plants aboard ships for delivery to shore

(Nikkei Asian Review; May 26) - Mitsui O.S.K. Lines is looking to generate power from liquefied natural gas aboard ships, running the power to shore through undersea cables, a field with little precedent worldwide that could give the Japanese shipping company a leg up on the competition. Tankers would deliver the LNG to power generators on board the ships. Compared with power plants on land, site acquisition and other initial costs can be kept low. The company is considering shopping the idea to emerging countries wary of the high price tag that comes with building power plants.

Mitsui O.S.K. is looking to diversify beyond shipping, a business heavily affected by market conditions. It would take less than 10 years to enter the offshore-power-generating market, President Junichiro Ikeda said. Japan's three largest maritime transport companies are navigating a historical slump in the market and will merge their containership units in July. Each company is expanding its offshore and energy businesses as part of diversification efforts.

India cancels coal-fired power projects

(ClimateWire; May 26) - India has canceled 13.7 gigawatts of proposed coal-fired power plants this month. The country late last year had plans to build more than 300 gigawatts of new coal-fired generating capacity by 2030, but the mood has shifted. Indian's record-low solar tariffs might be pushing the country toward falling solar energy costs. The Indian government also is promoting more natural gas-fueled power generation to reduce the reliance on pollution-producing coal.

The Indian state of Gujarat announced cancellation of a proposed coal power project that would have produced 4 gigawatts. The government noted a shift away from fossil fuels toward renewable energy. Tim Buckley, director of the Institute for Energy Economics and Financial Analysis, said earlier this month that he believes the transformation of the country's electricity sector is underway.

Norwegian shipping company orders 6 LNG carriers at \$1.2 billion

(Reuters; May 26) - Oslo-listed Flex LNG has signed contracts to buy six new liquefied natural gas carriers for its fleet by 2019, as it bets on increasing demand for the fuel in Britain and other countries, its chief executive told Reuters. The shipping company said earlier this year it was considering buying the six vessels, each with about 170,000 cubic metres of capacity, subject to securing funding for the \$1.2 billion transaction.

"All of the contracts have been signed and the initial payments have been processed," said Flex LNG chief executive Jonathan Cook. The work will go to South Korean shipbuilders Samsung Heavy Industries and Daewoo Shipbuilding and Marine Engineering. "We expect the first two ships (to be delivered) in January (2018), and four more by August 2019," Cook said. The six would be the first ships built for 11-year-old Flex LNG, which currently operates four LNG carriers on short-term charter.

Flex LNG is aiming to charter out some of the vessels in multi-year deals and commit others to spot and short-term LNG shipping markets. Analysts expect more than 20 million tonnes of new annual global LNG supply to come online this year. According to a report by the International Gas Union last month, the global LNG shipping fleet totaled 439 vessels as of January this year.

Kosmos Energy succeeds in West Africa exploration

(Wall Street Journal; May 21) - About 30 miles from the West African island nation of São Tomé and Príncipe, a research vessel is mapping a deep swath of the ocean floor on an increasingly rare mission: to make the next big oil discovery. With oil prices stuck in the third year of a historic funk, many energy companies have retreated from finding new sources of crude and many smaller exploration firms have sunk under the heavy weight of too much debt. But one firm that has survived is 14-year-old, Dallas-based Kosmos Energy, which is financing the underwater survey.

Kosmos has managed to discover and develop several large new fields in tough frontier environments such as off Africa's West Coast. Its latest coup: On May 8 it announced a discovery of an estimated 15 trillion cubic feet of gas off the coast of Senegal, where it is part of a joint-venture with BP. While other companies were taking on debt, Kosmos kept costs down in part by drilling in areas that some rivals thought of as hydrocarbon dead zones — the waters off Ghana, Mauritania and Senegal, and now São Tomé.

"We are seeing opportunities that were not there for us a few years ago," said Tracey Henderson, a Kosmos vice president and geophysicist who helps decide where the company goes prospecting for oil and gas. Its current undertaking, crisscrossing a section of the Atlantic slightly larger than Connecticut off the coast of Africa's smallest country, is one of the biggest offshore oil-exploration efforts of its kind in the region. In addition to going where other firms tend not to go, Kosmos takes a long time to pick its targets. Careful deliberations help it to drill fewer test wells, which in turn reduces costs.

Canada's oil patch finding it hard to recover laid-off workforce

(Bloomberg; May 24) - After years of being a magnet for job seekers, Canada's oil patch is turning into a bit of a no-go place — and that's making a recovery harder. Drilling and equipment providers are finding it hard to lure workers back to Alberta's gravel roads and remote camps — where temperatures can hit minus-40 — after massive job cuts in the past years left lasting bad memories. Many who had moved there returned to their home provinces and found jobs in construction, mining, fishing or forestry.

As Alberta oil producers seek to shift back to growth gear, the labor shortage adds another headwind to an industry challenged by high costs and middling oil prices. While a market improvement from last year's doldrums means oil-service providers are in high demand again, they have less sway to attract the necessary drivers to haul equipment and crews to staff fracking rigs.

"We're firing up more rigs, we're firing up more frack spreads, and we need more crews and more equipment, but those extra people aren't coming back," said Mark Salkeld, president of the Petroleum Services Association of Canada. While the industry is no longer in a position to offer the kind of salaries paid when oil sold for more than \$100 a barrel, there's more to workers' reluctance than just money. Some who were fired during the downturn took jobs in other sectors that may pay less but feel safer, said Garnet Amundson, CEO of Essential Energy Services.

Oil-field service providers not sharing in U.S. shale rebound

(Reuters analysis; May 25) - Oil services companies have been doing a lot more work as crude prices have lifted the U.S. shale industry from a two-year slump, but producers have been pocketing much of the cash while they squeeze service providers to keep costs down. Companies that provide the crews, labor and technology to drill, construct and operate wells are lagging in the recovery. The lopsided situation could chill or at least limit the production rebound, executives of services companies said.

Rising demand for services means companies have to boost salaries to attract workers and spend money for refurbishing equipment, but the businesses are often paid under lower-price fixed contracts signed with producers during harder times, these companies said. That has pressured margins, leading to further losses. Law firm Haynes and Boone said the U.S. oil field sector had 127 bankruptcies between 2015 and April 2017.

Among the 10 largest service providers, just five were profitable last quarter, the same number as a year ago. Yet seven of the top shale oil producers posted a first-quarter profit, up from just one a year ago. The service sector is struggling to change onerous contract terms set when oil prices were much lower. Service companies agreed to those

prices out of necessity; they needed cash flow to cover expenses. Those contracts, some of which extend into next year, are contributing to losses, preventing some companies from adding equipment or moving it to oil fields where it could be put to use.