Oil and Gas News Briefs Compiled by Larry Persily July 13, 2015

U.S. gas exports into Mexico nearly tripled between 2010-2015

(High Country News; Paonia, CO; July 7) - If you look at a recent map of Kinder Morgan's natural gas pipelines in the West, you'll see several new spurs heading south across the border into Mexico. The pipeline giant has been part of a major increase in energy exports in recent years that largely escaped notice. While potential exports of liquefied natural gas hogged countless headlines, U.S. gas exports through new and expanded cross-border pipelines nearly tripled from 2010 to 2015.

This growth is expected to continue as Mexico takes advantage of low-priced U.S. gas to help continue transforming its electricity sector, which in 2014 was opened to private-sector participation. "The quiet untold story is that the United States has been a net exporter of gas to Mexico for many years," said Martin Edwards, a vice president at the Interstate Natural Gas Association of America, a pipeline company trade group. "That's not only expected to continue, but to grow significantly over the next decade or so."

The growth is good news for Western producers, who saw their Eastern and Midwest markets dry up in recent years with the shale gas boom. Texas producers may be the biggest beneficiaries of new pipelines taking gas into Mexico. Kinder Morgan's Sierrita pipeline, which went online last year, runs to Sasabe, Ariz., where it meets a new line on the Mexican side of the border. In 2014, Kinder Morgan delivered an average 1.9 billion cubic feet of gas per day into Mexico through several different pipelines.

LNG exports would take Iran a decade or longer, Fitch says

(Fitch Ratings; July 10) - Iran has the long-term potential to become one of the world's top natural gas producers, with 1,200 trillion cubic feet of gas reserves, about 18 percent of the world's total, Fitch Ratings said in a note July 10. "But even if international sanctions on the country are lifted, it will take at least five years to ramp up production and build the pipelines necessary to become a large gas exporter."

LNG exports would take even longer. "The higher cost and complexity of liquefied natural gas projects means significant LNG exports would take a decade or longer to materialize," the Fitch report said.

"The International Energy Agency estimates that Iran currently exports only about 320 billion cubic feet of gas per year to Turkey, Armenia and Azerbaijan. Historically, Iran has never been a major exporter of natural gas, with most of its limited exports going to

the former USSR in the late 1970s," Fitch said, adding, "Several significant gas projects in Iran are in different stages of implementation. ... Iran is planning a number of gas export pipelines pending the removal of international sanctions."

Report warns Alberta's royalty review could risk investor confidence

(Financial Post; Canada; July 8) - The Vancouver-based Fraser Institute is warning that Alberta's current royalty review could lead to a repeat of the fallout from the province's last attempt eight years ago to raise more money from oil and gas production. Fraser Institute senior director of natural resource studies Kenneth Green thinks there are similarities to the mandate of that review and the royalty review announced by the province's New Democratic Party government in June.

Green authored a Fraser Institute report released July 9 that notes the NDP's election platform promised "to ensure a full and fair return to the people of Alberta for their energy resources," which Green said echoes the previous Conservative government's talk of getting its "fair share" of the province's oil and gas revenues. "It's sort of code language for 'we think things are currently unfair, therefore we're not getting as much as we should," Green said.

The think-tank's report details the effects of Alberta Premier Ed Stelmach's 2007 royalty review and said that it hurt investor confidence, which took until 2011 to recover when the province backtracked on the changes.

Nigeria considers bond sales to replace falling oil income

(Bloomberg; July 8) - Some Nigerian state governments are considering bond sales to replace dwindling income from crude, the source of about 70 percent of the revenue of Africa's biggest oil producer. Some of the 36 states constituting Africa's largest economy are unable to pay employee wages after their share of the nation's oil income, which accounts for the bulk of their budgets, has fallen dramatically.

"I know one or two states have started talking to investment banks in view of coming to the capital market," Mounir Gwarzo, director general of the Securities and Exchange Commission, said July 7 from the capital. Nigeria's Excess Crude Account, which holds the nation's oil savings and has a balance of about \$2 billion, will be drawn down by \$1.7 billion to help meet federal, state and local government financial obligations.

Meanwhile, to help ease the situation, Nigeria's federal, state and local governments have agreed to share a \$2.1 billion dividend from Nigeria LNG, the nation's producer of liquefied natural gas, to pay wages and meet their financial obligations. Although no state has yet applied to sell bonds this year, some state governors have discussed the

possibility. "If they restructure the commercial loans, it will give them breathing space and temporary liquidity to pay salaries and allowances," the SEC's Gwarzo said.

IEA expects global oil oversupply to continue until 2016

(Bloomberg; July 10) - Oil prices may fall further as the world remains "massively oversupplied," before markets tighten in 2016 when output growth outside OPEC grinds to a halt, according to the International Energy Agency. There will be no overall production growth outside OPEC next year for the first time since 2008, according to the IEA. Growth in U.S. shale oil supplies will stagnate to the middle of 2016 while output declines in Russia, the IEA said in its first detailed assessment of the year ahead.

Oil-producing nations around the world are reeling after OPEC decided in November to defend its share of global markets by pressuring rivals to curb output. Oil prices, about 45 percent lower than a year ago, may need to decline further to reduce the supply surplus, the IEA said. "The bottom of the market may still be ahead," said the agency, which advises 29 industrialized nations on energy policy. "Non-OPEC supply growth is expected to grind to a halt in 2016 as lower oil prices and spending cuts take a toll."

The slowdown in supplies will increase reliance on OPEC in 2016, the IEA said. Production from the 12-nation group climbed to a three-year high of 31.7 million barrels a day in June as Iraq reached a record of more than 4 million barrels a day and Saudi Arabia, the biggest member, added output. That leaves total OPEC supplies about 1.4 million barrels a day higher than the average needed next year, "and the group is not slowing down," according to the IEA.

Canadian regulators want say on small LNG export operation in B.C.

(Vancouver Sun; July 8) - The Canadian Environmental Assessment Agency has ruled that a proposed \$175 million LNG export terminal on the Fraser River, 10 miles south of downtown Vancouver, will require a federal assessment. The review is required because of the type of project and the possibility the project "may cause adverse environmental effects," said the agency. Neighboring municipalities and environmental groups have been calling for a federal review of the proposal by WesPac Midstream.

Many were concerned that the federal government would allow British Columbia to substitute its own provincial review for a federal assessment. The liquefied natural gas loading terminal is to be built adjacent to a small existing LNG plant that is undergoing a separate \$400 million expansion. The 44-year-old FortisBC LNG plant at Tilbury Island has long served the local market at peak winter demand. An estimated 122 ships and 90 barges a year would call on the new export terminal.

"The B.C. government is so wholly committed to LNG exports," said local environmental activist Kevin Washbrook, who opposed a provincial-only review. "I don't think anyone could really be satisfied that the B.C. review would be objective and thorough. This government wants to export LNG. It doesn't want to turn projects down." WesPac already has federal approval for exports of about 400 million cubic feet of gas per day as LNG, but needs approval for the marine jetty and operations.

First Nations in B.C. form group to assess impacts from LNG industry

(Globe and Mail; Canada; July 9) - Five First Nations, including two groups that support the proposed Pacific NorthWest LNG project near Prince Rupert, B.C., have joined forces to assess the environmental impact from the liquefied natural gas export industry. The Metlakatla, Kitselas, Gitxaala, Kitsumkalum and Gitga'at nations are members of the newly formed Tsimshian Environmental Stewardship Authority (TESA).

Working together, or *bax laansk* in the Sm'algyax language of the Tsimshian people, will benefit future generations of aboriginals, Metlakatla Chief Harold Leighton said July 9. "It really gives us a stronger voice." In December, the Metlakatla and the Kitselas signed impact benefit agreements with Pacific NorthWest LNG, a joint venture led by Malaysia's state-owned Petronas. The Kitsumkalum and Gitxaala have not yet announced their decisions whether to support Pacific NorthWest LNG.

TESA is generally supportive of the concept of B.C. LNG exports, with the initial focus on Pacific NorthWest LNG because that venture is the most advanced proposal in the Prince Rupert region. The new aboriginal authority has the mandate to examine other projects and the cumulative impacts in the long term. Absent from TESA is the Lax Kw'alaams First Nation, a Tsimshian tribe that has lingering worries about the potential impact of Pacific NorthWest LNG's project on juvenile salmon habitat in Flora Bank.

First Nation believes its influence in LNG decision is unprecedented

(Squamish Chief; Squamish, BC; July 9) - The clout the Squamish Nation holds in the decision over the proposed liquefied natural gas project in Squamish, 40 miles north of Vancouver, B.C., is unprecedented, said the nation's lawyer Aaron Bruce. "I think this Squamish process is quite unique. I don't think there is a precedent in the province or probably the country where the First Nation has had the ability to run a parallel process with some legal framework around it," said Bruce, who is a Squamish Nation member.

The Squamish Nation released 25 conditions on June 27 that have to be met before it would agree to the proposed LNG facility on its territory. Only five conditions have so far been released to its members or the public, including: Ensuring the proposed pipeline avoids the Wildlife Management Area of the Squamish Estuary; and providing insurance

in case any Squamish Nation member is hurt in an LNG-related accident. The plant, at 2 million metric tons of LNG per year, would be much smaller than most B.C. proposals.

The First Nation chiefs are expected to make a final decision on the project later this month. The project developer, Woodfibre LNG, announced June 30 it had been granted a suspension of its 180-day B.C. Environmental Assessment Office review period, which was set to end July 13. The province and the proponents are legally bound to respect the Squamish Nation, Bruce said. He said next steps include the Squamish Nation representatives and Woodfibre sitting down and going through the conditions.

B.C. construction industry expects LNG work will pay higher wages

(Journal of Commerce; British Columbia; July 10) - The president of the B.C. Road Builders and Heavy Construction Association says liquefied natural gas projects in the province will have a huge impact on his members. "LNG operations will be able to pay higher wages, which will allow LNG constructors to poach our members' skilled workers," said Jack Davidson. "We will see a shortage of project managers and supervisors. And the prices for labor, supplies and equipment will go up."

But Davidson also foresees a positive side of LNG development for B.C.'s heavy construction industry. "There will be lots of opportunities for heavy civil contractors," he said. "For example, work camp and plant site preparation, pipeline rights-of-way and access roads." Davidson said an LNG plant will be a nice bonus for the industry. "The major works inventory has never been higher," he said.

Davidson said his association has been preparing its members for potential LNG projects. "Our association is part of an industry initiative to pull together an organization that will help construction companies find skilled workers," he said. "We are also scrambling to start our own training program to help develop our ... skilled work force."

Shell says it needs \$80 a barrel to restart Alberta oil sands projects

(Financial Post; Canada; July 10) - Shell may consider restarting mothballed Alberta oil sands projects, but not until oil prices return to \$80 per barrel (U.S.), according to the company's top executive in North America. "It probably needs to be in the \$80 range to be interesting, but it all depends on what it costs," Marvin Odum, Shell's director of the upstream Americas said in an interview July 9. "It is a two–piece variable equation."

Like most players in the oil sands, Shell has seen its costs come down "considerably," easing the pain of oil prices that have tumbled 40 percent in the past 12 months. But Shell has delayed the 80,000-barrel-per-day Carmon Creek oil sands development by two years and decided not to proceed with the 200,000-barrel Pierre River project —

due to unfavorable economics. The company has also yet to sanction a 100,000-barrel Jackpine expansion which has secured regulatory approval.

"There is no particular driver to make that expansion happen right now as we look at other parts of the portfolio," Odum said, noting that Shell's oil sands expansion "is further back on the burner in terms of where we are investing now." Shell has to navigate the oil downturn at a time when it's managing its \$70-billion takeover of BG Group, expected to be completed in early 2016. The merger could lead to a scuttling of one LNG project in British Columbia, as both companies have LNG proposals in B.C.

Oman turns to solar power to help boost heavy-oil production

(Wall Street Journal; July 9) - For years, the unforgiving desert of Oman has required special tools to extract some of the planet's heaviest crude. The Persian Gulf sultanate's repertoire now includes a technology not generally associated with oil pumping: solar-powered oil recovery. One of the world's largest solar plants will be constructed to coax Oman's heavy oil out of the ground, according to Oman and its partners, Shell and French energy company Total.

Called Miraah — "mirror" in Arabic — the \$600 million, 1,021-megawatt solar-thermal facility is slated to start up in 2017. It's located at the Amal West oil field. The solar plant is the latest measure by Oman — the biggest Mideast oil producer that isn't a member of OPEC — in its fight to halt declining production. Oman boosted its output from about 700,000 barrels a day in 2007 to more than 950,000 barrels in 2014 with the help of enhanced oil recovery techniques like injecting steam, gas and polymers into wells.

Unlike solar panels that generate electricity, solar enhanced oil recovery uses large, curved mirrors to focus sunlight on a boiler tube containing water. The concentrated energy boils the water to produce steam that is then injected into a reservoir to heat the oil and reduce its viscosity, making it easier to extract and pump to the surface. Petroleum Development Oman expects the technology to account for about a third of its total production by 2023.

Pipeline will start gas deliveries to Tanzania commercial center

(Reuters; July 6) - Tanzania will this month put into trial operation a natural gas pipeline connecting offshore reserves to its commercial capital Dar es Salaam. The government said the commissioning of the pipeline would boost power generation and supply gas to factories and homes. The 330-mile pipeline and gas processing plants, financed by a \$1.23 billion Chinese loan, were initially expected to be completed last year but faced technical glitches.

Once operational, initial production would start at 80 million cubic feet per day in September, later rising to 130 million.

Tanzania estimates it has more than 55 trillion cubic feet of recoverable gas reserves off its coast. Discoveries offshore Tanzania and Mozambique have led to predictions the region could become a major liquefied natural gas exporter, though that would require tens of billions of dollars in private investment. Several oil and gas majors are working on potential LNG projects in the area but none have announced an investment decision.