Oil and Gas News Briefs Compiled by Larry Persily September 1, 2022

Canada tries again to build LNG export industry

(Reuters; Aug. 28) - Canada is taking a second crack at developing a liquefied natural gas export industry on its West Coast, a decade after soaring costs and Indigenous opposition derailed a previous wave of proposed LNG terminals. This time, companies are focusing on smaller projects they bet will be cheaper and faster to build. "Smaller project are easier to manage, especially in Canada," Enbridge CEO Al Monaco told Reuters. "We're getting a second chance and I hope we don't blow it this time."

Environmental and regulatory hurdles to pipelines have discouraged LNG terminals on Canada's Atlantic coast, while the British Columbia coast is close to the vast Montney shale gas field and Asian markets. Privately owned Port Edward LNG is raising capital and negotiating off-take deals with Asian buyers, a Shell-led consortium is looking at building Phase 2 of its LNG Canada project in Kitimat, B.C., and last month Enbridge outlined a C\$1.5 billion investment in the Woodfibre LNG plant just north of Vancouver.

The LNG Canada project is under construction with start-up planned for 2025 at 14 million tonnes per year capacity. Building a large LNG terminal in B.C. costs roughly double what it does on the U.S. Gulf Coast. So the trend, with the exception of LNG Canada, is for smaller plants. Woodfibre, at 2.1 million tonnes annual output, will start construction in 2023. Port Edwards LNG, at 300,000 tonnes, would use an existing dock and gas lines, and has engaged investment bankers to raise C\$350 million in financing.

"That is one major difference, the scale of these new LNG projects versus the old ones," said Dulles Wang, a Wood Mackenzie analyst. "Producers and developers are conscious of financial risk with larger projects." Developers also are securing support of Indigenous people early, said Karen Ogen-Toews, CEO of First Nations LNG Alliance.

Canada 'dithering around' instead of selling its gas to the world

(Financial Post columnist; Canada; Aug. 30) - Europeans this coming winter are facing a stark choice: heat or eat. As a result of the weaponization of energy by Russia, natural gas prices in Europe have skyrocketed and are trading at the energy equivalent of more than US\$500 per barrel. This pace of energy inflation is absolutely devastating to the European economy, with businesses shuttering and politicians pleading with citizens to reduce demand, everything from taking cold showers to limiting heating. Canada is an energy powerhouse with the ability to satisfy much of the world's growing energy needs for decades. We are blessed with an abundance of oil and gas, both produced to the highest environmental standards anywhere in the world. With such energy riches in a world literally begging for us to produce them, particularly liquefied natural gas exports, it's enormously frustrating to see us not take full advantage.

Canada is the world's fifth-largest natural gas producer, and when accounting for unbooked reserves in our Montney gas play, it has decades of remaining inventory. The business case for LNG has long been settled. Canada has been dithering around for 14 years and is still three years away from shipping its first molecule of LNG, while the United States started in 2016 and is now exporting about 12 billion cubic feet per day the equivalent of 70% of Canada's gas production — at spot European gas prices. That amounts to more than US\$1 billion in revenue per day. That could have been us.

Natural gas no longer 'a nuisance' for U.S. shale oil companies

(Reuters; Aug. 31) - Natural gas a few years ago was so unwanted that U.S. shale oil producers sold it at cost just to pump more oil. Today, prices are near 14-year highs, and new export terminals are rising along with production forecasts. The result is an earnings bonanza for companies that once shunned the fuel as an annoying byproduct. U.S. benchmark prices in late August topped \$10 per million Btu, and the boom-bust cycles of North American demand appear to have been broken amid surging exports.

The U.S. fuel has become key to Europe cutting its reliance on Russian gas. Liquefied gas exports this year have averaged 11.5 billion cubic feet per day, up 18% year-overyear. Three new export projects are under construction and nearly a dozen others aiming for financial approvals by 2023. "Two or three years ago, oil companies would not even set a hand in natural gas ... it was a negative, it was a nuisance, but it's not today," Jay Allison, CEO of shale producer Comstock Resources, said in August.

The largest U.S. independent oil producer, ConocoPhillips, reported last quarter that it sold natural gas for an average \$10.15 per thousand cubic feet, up 143% from a year ago. The company does not break out profit contribution from gas. Chesapeake Energy, which in 2019 spent nearly \$4 billion to buy an oil producer, now plans to sell that property and become a pure-play gas company. U.S. shale gas production is projected to reach 93.84 billion cubic feet per day in September, up 6.715 bcf a day from a year ago, according to the U.S. Energy Information Administration.

Cheniere files for additional expansion at Corpus Christi LNG

(Bloomberg; Aug. 29) - Cheniere Energy, the biggest U.S. exporter of liquefied natural gas, wants to expand its complex at Corpus Christi, Texas, according to a regulatory

filing. The company is seeking to add additional production capacity — up to 3 million tonnes per year — as well as another storage tank at its Corpus Christi plant, the filing with the Federal Energy Regulatory Commission showed.

Cheniere plans to follow up on its pre-filing and submit a formal application with FERC in February. If approved, construction would commence in October 2024. Cheniere's filing comes roughly two months after the company reached a final investment decision for the Stage 3 expansion of Corpus Christi LNG. The expansion, at full build-out, would boost the plant's production capacity to 25 million tonnes per year. Further expansion, as proposed in the company's recent FERC filing, would boost the total to 28 million.

Cheniere also operates the Sabine Pass LNG terminal in Louisiana, with 30 million tonnes annual production capacity. The company has signed six LNG supply deals since May, as Europe and Asia continue to compete for tight global supplies.

China has surplus gas due to economic slowdown; sells to Europe

(Markets Insider; Aug. 30) - China's economic slowdown has left it with a surplus of natural gas that it is reselling to energy-strapped Europe, according to a report. Boosted by cargoes from China, Europe's imports of liquefied natural gas jumped 60% year-on-year in the first half of 2002, according to a Nikkei report citing data from research firm Kpler. China's economy has slowed sharply in 2022 as Beijing implemented a strict zero-COVID policy and as a crisis grips the country's highly indebted property sector.

The economic slowdown has left some Chinese companies with a surplus of natural gas that they have been able to export to Europe, which faces a severe energy crisis. More than 4 million tonnes of Chinese LNG probably has been resold — about 7% of Europe's imports in the first half of the year — according to Nikkei. Local media reported that Sinopec, China's state-owned energy giant, has sold 45 cargoes of the gas on the international market. On top of the economic slowdown, an increase in coal-powered domestic energy supply has lowered the demand for gas in China, the report said.

LNG sellers assemble extra cargoes from leftovers

(Bloomberg; Aug. 30) - Sellers of liquefied natural gas in Asia are taking the rare step of packaging leftover fuel into full shipments to help meet surging demand in energy-starved Europe. The shipments mix supplies of LNG left over after partial deliveries from hubs like Australia and Oman to customers in Northeast Asia. The excess LNG is transferred into a single vessel out in the ocean to assemble a new cargo that can then be sold to Europe or another buyer in Asia, according to Bloomberg data.

Ship-to-ship transfers were identified in the waters off the coast of Malaysia in July, the first examples of the practice in nine months, according to energy intelligence firm Vortexa. The practice is rarely carried out in the LNG market, unlike in the oil sector where blending of various types of crude is fairly commonplace. Cobbling together this gas into a full shipment would usually be a waste of time and money, but the revived practice illustrates the extent of the global energy crunch. Europe's energy crisis has sent demand for LNG soaring and pushed prices to records, making it a lucrative option.

In the currently tight market, sellers are delivering as little volume as they can under term contracts, according to utilities, traders and analysts. Those multi-year contracts typically allow sellers to deliver a gas volume that can be 5% less than the actual amount, a clause known as minimum tolerance levels, they said. Holding back on the full volume allows suppliers to redirect the gas to buyers on the lucrative spot market. That's allowing majors to scrape up available supply from across their portfolio.

OPEC+ underproduction reduces available surplus

(Reuters; Aug. 31) - The world oil market will have a smaller surplus of just 0.4 million barrels per day in 2022, much less than forecast earlier, according to OPEC+, due to underproduction by several of its members, OPEC+ sources said. The report comes days ahead of an OPEC+ policy meeting on Sept. 5 and just over a week after OPEC leader Saudi Arabia said the group may cut oil output to retain market balance.

The Joint Technical Committee (JTC), which met on Aug. 31, advises the Organization of the Petroleum Exporting Countries and allies led by Russia, collectively known as OPEC+, on market fundamentals. Ahead of its meeting, the JTC issued a report, seen by Reuters, suggesting the market surplus would amount to 0.9 million barrels per day in a best-case scenario. After the meeting, the figure was put at 0.4 million, two OPEC+ sources said, as the group decided to include underproduction numbers by members.

The JTC report said oil demand — which it sees growing 3.1 million barrels per day this year — faces major uncertainties particularly from rising inflation and tightening monetary policy, which are eating into consumers' budgets. Separately, OPEC+ is ready to cut output amid volatility in the oil futures market, driven by thin liquidity and a disconnect with physical markets, Saudi Energy Minister Prince Abdulaziz bin Salman said last week. Five sources told Reuters that discussions are yet to begin on production policy beyond September and whether the producer group would cut output.

Russia profiting from high prices and ready buyers for crude

(The Wall Street Journal; Aug. 29) - Russia pumps almost as much oil into the global market as it did before its invasion of Ukraine and, at high prices, it's making more

money. Demand from some of the world's largest economies has given President Vladimir Putin the upper hand in the energy battle that shadows the war in Ukraine, and has confounded the West's bid to cripple Russia's economy with sanctions.

Sales are booming for Russia, the world's largest exporter of crude and refined fuels. And though Russia has cut natural gas sales to Europe, oil revenue more than makes up the difference. "Russia is swimming in cash," said Elina Ribakova, deputy chief economist at the Institute of International Finance. Moscow earned \$97 billion from oil and gas sales through July this year, about \$74 billion of that from oil, she said.

The country exported 7.4 million barrels a day in July of crude and products such as diesel and gasoline, according to the International Energy Agency, down only about 600,000 barrels a day since the start of the year. Although many European countries and the U.S. have reduced their imports of Russian oil, countries in Asia and the Middle East are buying more, which has helped Russia maintain its oil export levels.

An unexpected market has been the Mideast. Russian fuel oil, a lightly refined version of crude, goes to Saudi Arabia and the United Arab Emirates, where it is blended with other crudes and exported or burned to generate electricity, allowing the countries to export more of their own crude. India also has become a major buyer of Russian oil.

IEA director says Russia has undermined its oil and gas future

(S&P Global Platts; Aug. 29) - Russia has undermined its own oil and gas output plans, including its ambitions for additional liquefied natural gas exports, due to a loss of trust and relationships with companies needed to help reach such plans, International Energy Agency Executive Director Fatih Birol said at Norway's Offshore Northern Seas conference on Aug. 29. Birol said claims Russia that is benefiting financially from high commodity prices since its war on Ukraine are a "shallow, myopic view of the situation."

Speaking of Europe and the plunge in Russian gas exports to the continent — estimated at 75% — Birol said: "Russia has lost one of the strategic energy partners. Russia lost big trust among customers around the world. One should not mix losing a strategic energy partner vis-a-vis having some opportunistic, short-term trade exchanges." He said the global switch away from oil and gas as part of energy transition efforts could even be accelerated by Europe's energy crisis.

"Russia's oil outlook will significantly suffer without support coming from the companies, the technology companies and also service providers because most of the growth would have come from the much more geologically complex fields — from Arctic, from offshore — and this will not be possible without the support of those companies," Birol said. "In terms of LNG," Russia's goals of bringing its current export capacity of 1 trillion cubic feet per year to more than 4.5 tcf "will be going back to the drawing board."

Europe's turn to LNG import terminals could extend reliance on gas

(Associated Press; Aug. 31) - As winter nears, European nations, desperate to replace the gas they once bought from Russia, have embraced a short-term fix: Maybe 20 floating terminals that would receive liquefied natural gas from overseas and regasify it into heating and power-plant fuel. Yet the plan, with first deliveries by year-end, has raised alarms among scientists who fear long-term environmental consequences. They warn the terminals will extend Europe's reliance on gas, which releases climatewarming methane and carbon dioxide when it's produced, transported and burned.

Some scientists say they worry that the floating terminals will end up becoming a longterm supplier of Europe's vast energy needs that could last years, if not decades. Such a trend could set back emission-reduction efforts that experts say haven't moved fast enough to slow the damage being done to the global environment. Much of the LNG that Europe hopes to receive is expected to come from the United States.

Along the U.S. Gulf Coast, LNG export terminals are expanding, and many residents there are alarmed about the rise in drilling for gas and the resulting loss of land as well as extreme weather changes associated with burning fossil fuels. "Building this immense LNG infrastructure will lock the world into continued reliance on fossil fuels and continued climate damage for decades to come," said John Sterman, a climate scientist at the Massachusetts Institute of Technology.

Long-term oil production makes offshore look more attractive

(Reuters; Aug. 31) - Oil companies are pumping billions of dollars into offshore drilling, reversing a long decline in spending on the decades-long projects including some in the remote iceberg waters far off Canada's Atlantic coast. Surging oil prices are encouraging the investments, along with Europe's mounting energy demand as the Ukraine-Russia war drags on. Offshore production sites are more expensive to build than onshore shale. But once they are up and running, they can turn profits at lower prices than other forms of production, according to consultancy Rystad Energy.

They are also designed to pump for decades, a move that could increase financial risk for the projects as the world pushes for net-zero greenhouse gas emissions by 2050 to slow climate change. Offshore projects generate fewer emissions per barrel than other forms of oil production due to their massive scale, but they would still increase global air pollution and environmental groups warn that spills far offshore are hard to clean up.

One of the most remote developments is near Canada, where Norway's Equinor is close to a final decision on its Bay du Nord project 311 miles offshore of Newfoundland and Labrador. Reserves are pegged at 500 million barrels. The site is so far from shore

that it falls in international waters, requiring Canada to pay U.N. royalties. It would be a global first, according to Energy Regulation Quarterly, showing how far producers are willing to go for oil that could last up to three decades. Bay du Nord's floating production operation might be the first of several massive Newfoundland offshore projects.

Nuclear power making a comeback amid record gas and coal prices

(Bloomberg; Aug. 26) - Asia is giving the once-shunned nuclear power industry a second lease on life, thanks to the global energy crisis. Governments in Japan and South Korea are removing anti-nuclear policies, while China and India are looking to build more reactors to avoid future supply shortages and curb emissions. Even developing nations across Southeast Asia are exploring atomic technology.

The embracing of nuclear energy comes after the prices of gas and coal, the two fossil fuels used to generate most of Asia's power, have hit records this year. That's making clean and reliable nuclear power attractive for policymakers and utilities eager to rein in inflation, achieve green goals and curb dependence on overseas fuels. "Old resistances are crumbling surprisingly fast," said David Hess, a policy analyst at the World Nuclear Association. "Existing nuclear plants produce some of the cheapest electricity."

Record gas prices have made nuclear's economic advantages "all the more obvious," Hess said. It's a turnaround for the nuclear industry, which spent the past few decades beset by cost overruns, competition from cheaper fossil fuels and stricter regulations. While the nuclear comeback is global, gaining proponents from the U.K. to Egypt, the shift is perhaps most surprising in Asia, where in 2011 a massive tsunami hit the Fukushima plant in Japan, resulting in the worst meltdown in decades. The incident convinced governments that nuclear power's risks far outweigh the benefits. Mammoth costs of building new facilities, and frequent delays, also served as deterrents.

Diesel, heating oil supplies 50% below average in U.S. Northeast

(Associated Press; Aug. 28) - Diesel and heating oil supplies in the U.S. Northeast are more than 50% below the recent average, raising concerns that an extreme weather event could cause supply disruptions, federal officials said. Fuel supplies are lower than normal across the country for a variety of reasons, including the war in Ukraine. But it's the worst in the Northeast.

Diesel fuel and heating oil, which comprise the distillate category, are 63% below the five-year average in New England and 58% below the same average from Maryland to New York, according to a survey by the Department of Energy. The Northeast is heavily dependent on heating oil to keep homes warm in the winter, while other regions rely more on natural gas and electricity.

Also, the National Oceanic and Atmospheric Administration has projected an active hurricane season, and a powerful weather event could cause supply disruptions, since most fuel consumed from the Middle Atlantic states to Maine comes from Gulf Coast refineries, energy officials say. Energy Secretary Jennifer Granholm is convening a meeting of New England governors and their energy directors after Labor Day to discuss the situation. In the meantime, she has urged governors in a letter to take whatever steps they can to shore up fuel supplies in coming weeks.

Oil field decommissioning will cost Australian taxpayers billions

(Sydney Morning Herald; Aug. 29) - Australian taxpayers must chip in about A\$500 million toward cleaning up an aging Chevron oil field off the Western Australia coast, while an industrywide bill in coming decades will be many billions of dollars. In 2025, Chevron will begin dismantling hundreds of wells and connecting pipelines that have spread over Barrow Island during almost 50 years of oil production in the offshore nature reserve. In that time Chevron and partners ExxonMobil and Santos have shipped 335 million barrels of oil and paid about \$1 billion in royalties to the federal and Western Australia state governments. The governments will soon have to pay half of it back.

The Barrow Island royalty agreement requires royalties to be refunded equal to 40% of the cleanup costs in the four years after production ends. Rehabilitating the island is estimated to cost \$2.3 billion, with \$1.3 billion spent in the crucial four years, according to a Chevron document. This indicates a likely refund of over \$500 million. The federal government will bear 75% of the cost and the state the rest, in line with the royalty split.

The refund is small compared to what will be triggered by the decommissioning of Australia's offshore oil and gas sector, estimated by the Centre of Decommissioning Australia to cost A\$58 billion (US\$40.5 billion) to 2050. The first big effort will be in the Bass Strait, where in 2021 regulators ordered Exxon to seal 180 wells and dismantle 10 platforms by 2027 as the initial step to wind down Australia's oldest offshore operation. Regulators estimated the bill for decommissioning all infrastructure in the area, which is predominantly ExxonMobil's, at \$15 billion. The federal tax on oil and gas extracted offshore sets refunds at 40% of decommissioning costs up to the total tax paid.

Santos plans new pipeline for offshore carbon sequestration project

(Reuters; Aug. 29) - Australia's Santos said on Aug. 29 it would spend US\$311 million to build a new pipeline to transport gas from its offshore Barossa field to its Darwin LNG plant in Australia's Northern Territory. First gas production at the Darwin LNG plant using Barossa gas is targeted for the first half of 2025. Gas from Barossa will replace gas from the Bayu-Undan field, which is set to stop producing later this year.

The new pipeline for Barossa gas will free up an existing pipeline from Bayu-Undan to transport carbon dioxide from Darwin in the other direction for sequestration into the depleted Bayu-Undan oil and gas field. "Taking FID (final investment decision) on the Darwin Pipeline Duplication Project will allow for the Barossa project to be CCS (carbon capture and storage) ready," Santos CEO Kevin Gallagher said.

Santos' partners in the US\$3.3 billion Barossa gas project are South Korean energy company SK E&S and Japan's JERA. Santos is targeting a final investment decision on the Bayu-Undan CCS project in 2023. The Barossa field, located in waters off East Timor, holds an estimated 4.5 trillion cubic feet of natural gas.

Tellurian offering 11.25% interest on LNG project financing

(Houston Chronicle; Aug. 30) - Tellurian announced a public offering Aug. 29 in which it aims to raise an unspecified amount for construction of its \$16.8 billion Driftwood LNG project in Louisiana. The developer said it is offering notes that it will pay back by 2027 at an interest rate of 11.25% plus warrants to buy Tellurian shares. The company took the unusual step in March of starting construction before securing project financing.

Tellurian said in a statement: "There can be no assurance as to whether or when the (debt) offering may be completed." Tellurian Chairman Charif Souki said earlier this year the company was working to secure contracts for a total of 15 million tonnes per year — a little more than half of the facility's projected capacity of 27.6 million tonnes. Last year it reached deals for 9 million tonnes. Tellurian laid off 40% of its 176 employees in 2020.

It's been more than a year since Driftwood has landed a long-term sales contract, setting it apart from competing projects that have had no shortage of buyers since the Russian war on Ukraine sparked a global energy crunch and reignited the LNG industry. Long-stalled projects such as NextDecade's Rio Grande LNG (Texas) and Energy Transfer's Lake Charles LNG (Louisiana) have nearly caught up with Tellurian in the race for buyers. They have landed five and six deals, respectively, since the invasion.

Canadian Indigenous business seeks compensation for canceled line

(Bloomberg; Aug. 30) - An indigenous-backed energy company is seeking \$50 million (US\$38.2 million) from pipeline operator TC Energy after a falling out between partners on the now-abandoned Canada-to-U.S. Keystone XL oil pipeline. Natural Law Energy, a group representing a number of indigenous communities in Western Canada, is asking for "financial compensation for all the losses of income and the lost opportunities for future income" associated with an investment agreement signed in 2020, according to a letter signed by Natural Law CEO Travis Meguinis and seen by Bloomberg News.

Natural Law agreed that year to invest as much as \$1 billion in Keystone XL. President Joe Biden pulled a key permit after taking office in January 2021, squelching plans to complete the 830,000-barrel-a-day line. Natural Law's memorandum of understanding with TC Energy included possible equity stakes in other projects, according to Meguinis' letter. But no deals came to fruition and TC Energy informed Natural Law that it intends to end the investment agreement, the company said in an email.

Canadian companies have turned to alliances and equity partnerships with indigenous groups in try to overcome opposition to building new projects. Energy infrastructure is seen by some people as a threat to indigenous land and traditional resources, though others back involvement in pipelines as a way of alleviating poverty in communities.

U.N. appeals for more funding to empty decaying oil tanker

(Agence France-Presses; Aug. 30) - The U.N. appealed Aug. 30 for the last \$14 million needed to try and prevent a stricken oil tanker from triggering a disaster off Yemen that could cost \$20 billion to clean up. The decaying 45-year-old FSO Safer, long used as a floating storage platform and now abandoned off the rebel-held Yemeni port of Hodeida, has not been serviced since Yemen plunged into civil war more than seven years ago.

If it breaks up, it could unleash a potentially catastrophic spill in the Red Sea. David Gressly, the United Nations' resident and humanitarian coordinator in Yemen, leads U.N. efforts on the Safer. "Less than \$14 million is now needed to reach the \$80 million target to start the emergency operation to transfer oil from the Safer to a safe vessel," said Gressly's communications adviser Russell Geekie. "We're deeply concerned. If the Safer continues to decay, it could break up or explode at any time," he told reporters.

"The volatile currents and strong winds from October to December will only increase the risk of disaster. If we don't act, the ship will eventually break apart and a catastrophe will happen. It's not a question of if, but when." Geekie said the result would potentially be the fifth largest oil spill from a tanker in history, with the cleanup costs alone reaching \$20 billion. The Safer contains four times the amount of oil that was spilled during the 1989 Exxon Valdez disaster. The ship contains 1.1 million barrels of oil.