

Oil and Gas News Briefs

Compiled by Larry Persily

November 7, 2022

California utility has to reinvent itself as state turns away from gas

(Wall Street Journal; Nov. 2) - As California expands its efforts to phase out natural gas use in homes, the nation's largest gas utility is trying to reinvent itself for a future in which far fewer customers use its core service. Southern California Gas Co., a unit of Sempra, is studying how to repurpose its system — and handle the costs of doing so — as the state works to ban the sale of gas furnaces and water heaters starting in 2030.

The state's initiatives are the latest in a series of measures aimed at reducing future gas use to address climate change. Already, 50 California cities and towns have regulations in place to ban or limit gas hookups in new buildings. SoCalGas faces a challenge in transforming its business away from natural gas, one that will require billions of dollars to build new pipelines and reuse or retire existing ones. Unlike California's other large utilities, PG&E and Sempra's San Diego Gas & Electric Co., SoCalGas doesn't have an electricity business and relies entirely on its gas system for revenue.

The utility, which serves 21.8 million customers primarily in Southern California, said it envisions overhauling much of its system to transport what is known as green hydrogen, an energy source created with renewable energy that doesn't emit carbon when burned. As more homes and businesses install electric heaters and appliances, the company anticipates growing its industrial customer base by delivering green hydrogen for use in electricity generation, heavy transportation and other carbon-intensive processes.

Fossil fuels in a rebound since last year's climate summit

(Washington Post; Nov. 3) - The U.N. climate summit in Glasgow last year ended with a resounding repudiation of fossil fuels, with countries including the United States signaling that it would be a costly mistake to move forward with big new oil, gas and coal projects. The mounting calls to limit investment in such ventures seemed to resonate: Many major projects had stalled, struggling to line up financing as the world looked toward a future of cleaner energy.

But a year later, the fossil fuel industry is experiencing a remarkable rebound, with sudden momentum behind more than 80 projects that range from coal-fired power plants to hulking gas export terminals, many of which could lock the world into decades of new greenhouse gas emissions. The backsliding is occurring as nations grope for alternatives to Russian natural gas, cut off by sanctions after the invasion of Ukraine.

It will be a major point of tension at this year's global climate summit, which begins in Egypt on Nov. 6. It throws into further jeopardy a global carbon budget that was crafted to avert climate chaos by threatening to deluge countries with far more fossil energy than they need to replace supplies from Russia. "If all of that new infrastructure is built and used until the end of its lifetime, there is no chance of meeting the goals in the Paris Agreement," said Niklas Hohne, founder of the NewClimate Institute think tank and an emissions scholar at Wageningen University in the Netherlands.

Satellite images track methane emissions in China

(Bloomberg; Nov. 5) - A high-resolution satellite image taken less than 48 hours ago appears to show methane releases from China's largest oil field. The image is the first in a series of exclusive observations Bloomberg Green will publish during COP27 from emissions monitoring firm GHGSat. The detection highlights the rapidly expanding ability of satellites to identify and track methane almost anywhere in the world that is driving a new era of climate transparency in which greenhouse gases will be quantified and attributed in near real-time to individual assets and companies.

Scientists say reducing the emissions of the potent greenhouse gas, which has 84 times the warming power of carbon dioxide during its first two decades in the atmosphere, is one of the fastest and cheapest ways to cool the planet. Methane is the primary component of natural gas and responsible for about 30% of the Earth's warming. Leaks can occur during extraction and transport of the fossil fuel, but methane is also routinely generated as a byproduct of oil and coal production and if operators don't have infrastructure to get the gas to market they may release it into the atmosphere.

The satellite image taken on Nov. 4 and shows six methane releases in northeast China from the Daqing oil field, according to GHGSat. Estimated emissions rates ranged between 1,000 and 2,000 pounds per hour and the cumulative rate was 10,000 pounds an hour, the company said. If the releases lasted for an hour, they would have the same short-term climate impact as the annual emissions from about 81 U.S. cars. China is the world's largest source of energy-related methane emissions with an estimated 28 million metric tons last year, according to the International Energy Agency's Methane Tracker.

Gabon sees value in forest as it plans for end of oil production

(The New York Times; Nov. 3) - Gabon is so lush with forests and wildlife its nickname is Africa's Eden. It's also one of the continent's major oil producers. Gabon for decades has relied on petroleum to drive its economy. But officials know their oil won't last forever. So, they've turned to Gabon's other abundant resource — a huge Congo Basin rainforest, full of valuable trees — to help make up the difference once the oil is gone. The country in 2021 averaged 181,000 barrels a day, down from 236,000 in 2011.

Gabon is engaging in activities that have become dirty words in the world of climate activism: It allows palm oil plantations in certain areas and is turning rainforest trees into plywood. However, unlike Brazil and other countries that have stood by as rainforests are decimated, Gabon has adopted strict rules designed to keep the vast majority of its trees standing. Its aim is to strike an important balance between the needs of a single nation and those of a world facing a climate crisis.

Gabon has banned raw timber exports (France was a major buyer) and created an industrial complex with tax breaks to attract furniture companies, plywood makers and others to build factories and create jobs. Rules limit logging to just two trees per 2.5 acres every 25 years. And, to fight illegal logging, a new program tracks logs with bar codes. Gabon's approach appears to be working, and other countries are already copying aspects of its plan, making it a potential blueprint for rainforest protection.

Guyana increases government take for next oil leasing round

(Reuters; Nov. 5) - Guyana, one of the world's hottest oil-drilling zones, will offer 14 offshore exploration blocks under terms that "significantly" increase its share of oil revenue, the South American nation's vice president said on Nov. 3. Officials this week approved an oil lease auction with timing details to be disclosed by the Ministry of Natural Resources. The auction will include three deep-water and 11 shallow-water exploration blocks, Vice President Bharrat Jagdeo said in an address.

A new profit-sharing agreement that will cover future oil production agreements is under development and will be finalized before the auction ends, he said. It will include a 50/50 split of oil profits and tack on a 10% royalty rate and a 10% corporate tax rate, Jagdeo said. Contract terms "shift significantly" the revenue split, with Guyana receiving a "greater share of the proceeds" compared to the existing production-sharing agreement terms, Jagdeo said.

A group led by ExxonMobil that includes Hess and China's CNOOC has discovered 11 billion barrels of recoverable oil in a 6.6-million-acre block off the country's coast. That agreement has been criticized for providing Guyana, an impoverished nation of fewer than 800,000 people, with only about 15% of oil revenues — including a 2% royalty rate. Production started in 2019, and was up to about 350,000 barrels a day in September.

Analysis shows more carbon emissions from LNG than piped gas

(BBC News; Nov. 3) - Europe's growing reliance on liquefied natural gas is coming at a high environmental cost, new research shows. LNG imports have soared in the wake of limited piped gas from Russia. Analysis, seen by the BBC, shows that LNG production

and transport causes up to 10 times the carbon emissions compared to pipeline gas. There are worries that the extra carbon could hamper efforts to rein in global warming.

World leaders will meet in Egypt next week for the COP27 climate conference, amid concern that the war in Ukraine has distracted efforts to cut carbon. In the U.K. and Europe, worries over energy supplies have seen an unprecedented uptick in imports of LNG. Data shows that LNG imports were up 65% in the first nine months of this year. But according to new analysis by Norwegian research firm Rystad Energy, shared with the BBC, the production and shipping of LNG is extremely energy intensive.

To make LNG, gas is cooled in giant fridges to minus 256 degrees Fahrenheit. While the emissions from burning the gas are the same for LNG and piped supplies, the extra energy involved in making and transporting LNG is significant. "For piped gas from Norway, we see around 7 kilograms of CO₂ per barrel, but for LNG imports into Europe, we estimate the average is over 70 kilograms," said Patrick King from Rystad.

For some, this rush for LNG is a triumph of short-term thinking. "The real opportunity, out of a bad situation is to put incentives in place to reduce our gas usage," said Paul Balcombe, of Queen Mary University of London, who has researched LNG emissions. "We need to increase energy efficiency and our renewables deployment. Rather than just looking at the really, really short-term replacement ... we need to look at the slightly longer term, which will have way better cost implications, financial and environmental."

IEA warns Europe needs to focus on avoiding gas shortage next year

(Reuters; Nov. 3) - Europe needs to act now to avoid a natural gas shortage next year given the loss of Russian supply and expectations that China's demand will increase, the International Energy Agency said on Nov. 3. The European Union has succeeded in filling gas storage to 95% ahead of this winter, 5% above the five-year average, but the IEA said the challenge next year was likely to be greater and there is a danger that mild weather had led to a sense of complacency.

"We are ringing the alarm bells for the European government and for the European Commission for next year," IEA head Fatih Birol told journalists when presenting a report on Europe's supply-demand balance for 2023-2024. The report found that Europe could face a gap of as much as 1 trillion cubic feet of gas during the summer that is crucial for refilling gas storage sites in 2023. Such a gap could see storage only 65% full ahead of next winter, instead of a targeted 95% level, Birol said.

Governments need to speed up improvements in energy efficiency and accelerate the deployment of renewable energy and heat pumps, among other measures, Birol said. Depending on the weather, storage levels by the end of the 2022-2023 heating season could be drawn down to "anywhere between 5% and 35%." Supply, already disrupted, could fall further next year if Russian pipeline gas flows stop completely, while

competition for liquefied natural gas, on which Europe has relied heavily this year, is likely to increase as China's demand grows, the agency said.

Europe should not get overconfident about energy response

(Bloomberg analysis; Nov. 4) - A quiet confidence is emerging amid the gloom of Europe's energy crisis. Natural gas prices are falling as storage tanks fill up. Demand is being dialed down, helped by warm weather. Getting through winter without relying on Vladimir Putin's gas is looking achievable. Bloomberg Economics last week floated the possibility that even a shallow recession might be averted if energy costs kept falling and luck stays on policy makers' side. But confidence mustn't turn into complacency.

The huge cost and effort in preparing for winter show the extent to which Europe is still paying the price for its dependence on Russian gas, which once accounted for 40% of the European Union's supplies; it's now below 20%. The quest to fill up storage ahead of winter has required a scramble to maximize alternative sources at wartime prices.

A calculation by Ben McWilliams, of Brussels-based think tank Bruegel, suggests the total value of extra gas in storage across the EU between April 1 to Oct. 31 is 107 billion euros (\$104.8 billion). The danger is that the bill for next year could be even higher. A cold winter could deplete existing storage and kick off another race to fill tanks, only this time potentially without the 15% to 20% layer of supply from Russia. A lot also depends on being able to reduce demand, which comes at a cost. Countries are scrambling.

Success hinges on whether EU countries can find a unified path through this energy crisis. Europe has shown an admirable willingness this year to pay the cost of its past errors. But it needs to do more. The cost of complacency could go much higher.

LNG tankers hang out in European waters, waiting on higher prices

(Financial Times; London; Nov. 3) - More than 30 tankers holding liquefied natural gas are floating just off Europe's shoreline as energy traders bet the autumn price reprieve prompted by robust supplies and warm weather will prove to be fleeting. The ships, hauling a combined \$2 billion worth of LNG, are idling or sailing slowly around northwest Europe and the Iberian Peninsula, according to shipping analytics company Vortexa. The number of LNG vessels in European waters has doubled in the past two months.

The traders who control the tankers are holding out for higher prices in the coming months, when temperatures cool over the winter and the glut of natural gas in Europe's storage now begins to be drawn down. Another 30 vessels are on their way, currently crossing the Atlantic and expected to join the queue ahead of the winter, Vortexa data

show. The queue has come as European countries have filled their gas storage tanks to near their limits ahead of winter.

It mirrors a similar situation in the oil industry during the height of the coronavirus crisis, when a glut of crude led traders to park their oil on ships as floating storage, waiting for prices to rise again. Similar actions have been seen in the LNG market before, one trader said. With gas storage capacities full, "LNG vessels have been queued up outside European LNG receiving terminals, chasing what they expected to be the premium market for this LNG," said Felix Booth, head of LNG at Vortexa, adding that it will probably take another month for the cargoes to find a terminal to offload.

Natural gas consumption surges after Spain imposes price limit

(Bloomberg; Nov. 3) - Natural gas use is surging in Spain, offering an insight into the unintended consequences of capping fuel prices to shield the country's households and businesses from the energy crisis. Since Madrid imposed a price limit on gas burned for electricity, demand for the fuel has surged at plants that benefit from lower costs under the program. Spain's gas consumption for power production in October was almost 80% higher than a year earlier, according to Enagas, the country's gas network operator.

While the price cap has kept Spain's power costs lower than in other countries, the increased demand for the fuel runs counter to Europe's efforts to conserve supplies since Russia cut flows. It's a situation underlined by the International Energy Agency, which warned Nov. 3 that the continent faces a gas shortage next year unless governments take "immediate action" to reduce demand.

North Asia stockpiling LNG, conserving power to prepare for winter

(Reuters; Nov. 3) - Key North Asian economies are stockpiling fuel, diversifying sources and conserving power to ensure adequate supplies for winter, as an unprecedented global energy crisis makes spot liquefied natural gas purchases costly. Major LNG importers — Japan, South Korea and China — have been grappling with soaring prices of the fuel after Russia cut supplies to Europe following its invasion of Ukraine, leading to a surge in spot prices worldwide as well.

A plunge in the value of local currencies from Japanese yen to Chinese yuan against the U.S. dollar has also increased the burden of costly energy imports on these economies. Led by crude oil, LNG and coal, Japan's September imports jumped 45.9% year-on-year to hit a record high in terms of value as a weak yen aggravated already high fuel import costs. "Our basic approach is to have relatively high inventories during this winter," the CFO of Tokyo Gas, Japan's biggest city gas supplier, said.

"If LNG from Russia is disrupted, we will need to negotiate to take alternatives from other suppliers," CFO Hirofumi Sato added. LNG inventories at Japan's city gas providers, as well as major utilities, were above a five-year average, according to recent data. South Korea too is stockpiling LNG and began buying spot cargoes in September, a month earlier than usual, an industry ministry official said. But analysts say persistent supply risks or an unexpected cold snap could negate the effects of such measures.

Sempra expects to proceed next year with Texas LNG project

(Reuters; Nov. 3) - California energy company Sempra Energy said Nov. 3 that its Sempra Infrastructure unit plans to greenlight the first phase of its proposed Port Arthur liquefied natural gas export plant in Texas during the first quarter of 2023. "We have made significant progress on advancing development at Port Arthur LNG, where we now expect to take a final investment decision on Phase 1 in the first quarter of next year," Sempra CEO Jeffrey Martin said in a press release on third-quarter earnings.

If approved, the roughly \$10.5 billion plant could enter service around 2027. The project is fully permitted. The two liquefaction trains at the proposed plant would produce a total of around 13 million tonnes per year of LNG. Earlier this year, ConocoPhillips inked a tentative agreement for a 30% stake and 5 million tonnes per year of off-take from the proposed facility. Sempra said it was also actively marketing LNG from a proposed second phase at Port Arthur, which could double the plant's capacity.

The Wall Street Journal reported that Sempra was in talks to sign a 20-year non-binding agreement to provide U.S. pipeline company Williams Cos. with 3 million tonnes per year out of Port Arthur, according to people familiar with the matter. Sempra also is part of a joint venture that owns the operating 15-million-tonne Cameron LNG export plant in Louisiana, where the partners are considering an expansion. The company also is building a 3-million-tonne export plant at its Costa Azul LNG import plant in Mexico.

Shrimpers, fishermen protest outside LNG conference in Louisiana

(American Press; Lake Charles, LA; Nov. 3) - A flotilla of shrimping and fishing boats on the Calcasieu River in Louisiana delivered a message to the liquefied natural gas industry that they will protect their homes and livelihoods from destruction. With a banner that said, "We Won't Take the Bait: LNG Out of Our State," the fisherman delivered a message in sight of the Golden Nugget Casino, where oil and gas industry executives celebrated record profits at the LNG Americas LNG & Gas Summit.

"We're here to protect our homes, our livelihoods and our families," said Travis Dardar, an indigenous fisherman and shrimper from Cameron who led the flotilla. "Companies like Venture Global build these massive gas export terminals that fill our fishing grounds

with concrete, poison the seafood in our waters, and make our homes unlivable — and they expect us to just sit there and take it? Hell no. I've been a fisherman all my life, and so have most of us here, and ain't no way we're gonna let them destroy our way of life.”

Since the federal fossil fuel export ban was lifted in 2015, the Gulf Coast has boomed with new and expanded facilities. “This is way more catastrophic than any hurricane,” said Dardar, pointing out that people can rebuild after a hurricane — but can't replace wetlands once concrete pads have been built in their place. Dardar and the fishers and shrimpers were joined Nov. 2 by former oil and gas workers, locals and people from across the Gulf concerned about the rapid build-out of LNG terminals along the coast.

Trinidad asks U.S. approval to take Venezuelan gas for LNG plant

(Reuters; Nov. 4) - The government of Trinidad and Tobago is asking the United States to authorize Venezuelan gas imports to restart an idled liquefaction train in the Caribbean nation, four sources close to the talks said. Under U.S. sanctions, companies and governments must obtain authorization from the U.S. Department of Treasury to do business with Venezuelan state-run oil company PDVSA.

Trinidad's past requests for U.S. approval have gone unanswered, but the Biden administration's willingness to ease some sanctions on Venezuela if President Nicolas Maduro and the opposition make progress in talks for a presidential election could provide a new opportunity. The gas would mainly come from Venezuela's Dragon field off the country's eastern coast, where PDVSA has found reserves of 4.2 trillion cubic feet. The project was headed for production almost a decade ago, but stalled over lack of capital and partners, and U.S. sanctions.

If approved, the gas could restart an idled liquefaction train with a 500 million-cubic-feet-per-day capacity at Trinidad's flagship Atlantic LNG project. "All we need is access to additional gas supply, right next door," said Trinidad Energy Minister Stuart Young last month. Trinidad is Latin America's largest LNG exporter. Even with U.S. approval, it could take years of investment and development to bring Venezuelan gas to Trinidad.

Enbridge plans expansion of gas line capacity from B.C. to U.S.

(Reuters; Nov. 4) - Canadian energy infrastructure firm Enbridge on Nov. 4 announced a \$3.6 billion expansion of the southern segment of its British Columbia gas pipeline system after strong demand from customers. The Calgary-based company also launched an open season to gauge shipper interest in a potential \$1.9 billion expansion of the northern section of the same system.

Gas production in Western Canada this year neared record levels of 18 billion cubic feet a day. Enbridge CEO Al Monaco said that supply growth coupled with future demand from planned liquefied natural gas export projects was underpinning the expansions. Enbridge said the expansion of the southern part of its system, known as T-South, will add 300 million cubic feet per day of capacity. It will serve customers in the Pacific Northwest and southern B.C., as well as the Vancouver-area Woodfibre LNG project that Enbridge bought a \$1.5 billion stake in earlier this year.

Enbridge is also looking at adding about 500 million cubic feet per day of capacity to the northern section of the system, T-North, which connects the gas-producing region around Fort Nelson in northeastern B.C. to the southern part of the pipeline network. The open season for T-North is expected to end on Jan. 10, 2023.

Russia top supplier of oil to India in October

(The Times of India; Nov. 3) - Russia muscled its way as India's top oil supplier in October, relegating Iraq and Saudi Arabia to second and third spots, respectively, according to market reports based on shipping data. From less than 1% in 2019, Russian oil today makes up 22% of about five million barrels per day imported by India, the world's third-largest oil guzzler after China and the United States

In contrast, the Indian market share of Iraq, which had been the top supplier for years, stood at 20% in October, followed by Saudi Arabia 16%. India's oil imports from Russia surged after Moscow's invasion of Ukraine as traders saddled with Russian barrels due to Western sanctions offered heavy discounts to buyers. Indian refiners also are hunting for further bargains ahead of the ban on Russian energy by the European Union and the price cap proposed by the U.S. take effect.

Canadian natural gas important supply to U.S. West and East

(U.S. Energy Information Administration; Nov. 3) - Natural gas imports from Canada, both on a gross and a net basis, have declined since all-time highs in the 2000s. Nevertheless, Canadian gas remains an essential element of the U.S. market and helps to ensure reliable supply in parts of the United States. The ability of Canadian suppliers to rapidly increase flows as a result of ample capacity on pipelines and at storage facilities also helps to stabilize the U.S. market during supply or demand shocks.

In 2005, the share of total U.S. supply of dry gas met by pipeline imports from Canada averaged 17%, while U.S. dry gas production averaged 49.5 billion cubic feet per day. Since then, the share of supply made up by imports from Canada has been declining, as U.S. production of gas from shale resources has grown. Over the 12-month period

through July of this year, gross imports from Canada accounted for on average 8% of U.S. supply, while U.S. production averaged 96.6 billion cubic feet per day.

Despite the overall reduction in imports, Canadian gas remains important, particularly at the regional level. For example, in the U.S. West, Canadian gas is a source of steady supply and has been trending up, averaging 3.6 bcf per day over the 12-month period through July 2022. Imports that cross the U.S.-Canada border at Sumas, Washington, and Eastport, Idaho, principally supply metropolitan areas in the Pacific Northwest and California. Canadian gas also plays an important role in the Eastern U.S.

Oil exports resume after Russia takes over Exxon Far East project

(Bloomberg; Nov. 2) - Oil exports from Sakhalin-1 are ramping up after Russia took control of the project in the nation's Far East from ExxonMobil, which had pledged to exit the country following the invasion of Ukraine. Two tankers recently loaded Sokol crude from the De-Kastri terminal and both vessels have signaled Yeosu in South Korea as their destination, marking the first exports from the project in five months, according to data compiled by Bloomberg.

Russia's Rosneft had issued a tender that closed last week to sell six prompt cargoes, mostly for November loading, said traders. Exxon had been winding down output at Sakhalin-1 since May after flagging its intention to exit the country, with Moscow terminating the company's interests in the project and transferring it to a newly formed Russian operator. Sokol crude can be delivered to major refining hubs in China and South Korea in about three to five days.

Some cargoes offered by Rosneft were at a discounted price to the Dubai benchmark on a delivered basis to China, according to traders involved in the Asian market who asked not to be identified as the information is private. Smaller trading houses were also involved in marketing the oil, with buyers potentially fearing damage to their reputation or facing financing issues should they deal directly with the Russian oil company, said traders. Sokol shipments are most likely to flow to China and India, they added.

U.S. crude exports climb to record high

(Reuters; Nov. 3) - Deliveries of U.S. crude oil to Asia are set to touch a record 1.8 million barrels per day this month, Kpler shipping data showed, as demand climbed on a widening discount to global oil. Refiners in China, India and South Korea are returning as big U.S. crude oil buyers after several months of scooping up cheap Russian barrels. Asia's renewed buying reflects soaring demand for crude to produce diesel and comes as Europe continued to stock up in the aftermath of Western sanctions on Russia.

Overall, U.S. crude exports last week touched a weekly record of 5.1 million barrels per day, boosted by higher shale production. The U.S. benchmark West Texas Intermediate traded at a nearly \$9 a barrel discount to global Brent, compared to a \$6 discount at the start of September. A wider discount makes U.S. oil more affordable to foreign buyers. South Korea is set to import a record 619,000 barrels per day of U.S. crude oil, according to Refinitiv, becoming the month's top Asian importer of U.S. crude.

China will draw at least 450,000 barrels per day, its highest since December 2020, while India's demand is forecast to be the highest since March, Refinitiv data showed. There is also strong global demand for diesel that is encouraging refiners across the region to add production runs, said Matt Smith, an analyst at data firm Kpler. U.S. oil production was 11.98 million barrels per day in August, the latest month of official figures, as producers raise activity after pandemic cutbacks.