Oil and Gas News Briefs Compiled by Larry Persily August 4, 2022

European crisis could help — or hurt — shift to greener energy

(The Wall Street Journal; Aug. 1) - The Ukraine war has spurred many countries to lean more on fossil fuels in the short term while pledging to move away from them faster in the future. Now, a deepening energy crisis, a global heat wave, soaring prices, supplychain snarls and worries about an economic downturn are threatening to delay those longer-term promises to transition to lower-emission energy sources. The situation is particularly acute in Europe, where the prospect of severe fuel shortages this winter is focusing leaders' attention on immediate problems, investors and economists say.

Green-energy supporters say the Ukraine war and high fuel prices should accelerate the transition, forcing shifts away from oil and gas, and changing consumer habits that otherwise might have stayed entrenched. "The ongoing war in Ukraine has highlighted the importance of electrification and renewables," said Francesco Starace, CEO of Italian utility Enel, which is building solar-manufacturing plants and other green projects.

But many market watchers say Europe's green plans are taking a back seat to efforts to tackle the effects of the Ukraine war, high inflation and stressed supply chains. The shift to greener energy will be daunting to fulfill, they said. "There's the sense that (money to scale up renewables) will have to come later, given the crisis," said Susi Dennison, European power program director at the European Council on Foreign Relations. But "if we don't make the investments that are needed now on green energy, then what we're seeing as short-term measures will just become longer-term measures."

U.S. crude benchmark drops to \$90, lowest since February

(Reuters; Aug. 3) - Oil plunged Aug. 3 after a U.S. inventory report signaled slowing demand and the Organization of the Petroleum Exporting Countries agreed to a small production increase in September. West Texas Intermediate futures fell 4% to settle at \$90.66 a barrel, the lowest level since early February, before Russia invaded Ukraine. A government report dragged prices lower as crude stockpiles rose by more than 4 million barrels, while the four-week average for gasoline demand fell below the 2020 level.

The data arrived after OPEC and its allies cited the prospect of slowing demand in its decision to lift supply by just 100,000 barrels a day, a tiny fraction of the group's overall production and a far smaller increase than it has added in recent months. Delegates said they are concerned a potential recession in the U.S. and COVID-19 lockdowns in China will sour demand. U.S. gasoline figures have been closely watched by the market

to get a read on where consumption stands, said Rebecca Babin, an energy trader at CIBC Private Wealth Management. "This week's release will keep buyers on hold."

OPEC's muted additions to global supply come as oil prices have settled at the lowest in six months, giving back all of crude's gains since Russia began its war. At the same time, investors continue to fret about a global economic slowdown and signs that some of the extreme strength in crude markets over recent months may be easing. The unwinding of prices was also seen further down the futures curve. Crude inventories at Cushing, Oklahoma, the nation's largest stockpile hub, rose for a fifth week in a row.

Record electricity demand puts pressure on U.S. natural gas supplies

(Reuters columnist; Aug. 2) - Record U.S. electricity consumption is driving near-record combustion of gas by power-generation plants, ensuring gas inventories remain under pressure and prices stay high. In common with other parts of the U.S. economy, growth in gas production and the electricity supply have not kept pace with growth in demand after the pandemic, creating ongoing shortages. U.S. natural gas prices have been around \$8 per million Btu this week, \$1 off last month's highs but double of a year ago.

Net electricity generation between January and April surpassed previous seasonal records, and gas-fired units reached their second-highest seasonal output, according to data from the U.S. Energy Information Administration. Gas-fired generation is surging despite high fuel prices. There is not enough spare capacity in the generation system to reduce reliance on gas, especially since many coal units have been decommissioned.

Gas prices paid by generators in the first four months of 2022 were more than double of the same period in 2020. Gas generators accounted for 35% of all power output in the first four months, compared with 21% from coal, 19% from nuclear, 16% from wind and solar, and 7% from conventional hydro. One consequence is that gas-fired generators burned 3.832 trillion cubic feet of gas in the first four months of the year, second only to 4.083 tcf in 2020 and well above the pre-pandemic five-year average of 3.315 tcf.

Germany faces winter of energy shortages and high prices

(Bloomberg; Aug. 1) - Germany's presidential palace in Berlin is no longer lit at night, the city of Hanover is turning off warm water in the showers of its pools and gyms, and municipalities across the country are preparing heating havens to keep people safe from the cold. And that's just the beginning of a crisis that will ripple across Europe. It might still be the height of summer, but Germany has little time to lose to avert an energy shortage this winter that would be unprecedented for a developed nation.

Much of Europe is feeling the strain from Russia's squeeze on gas deliveries, yet no other country is as exposed as the region's biggest economy, where nearly half the homes rely on gas for heating. With Moscow continuing to tighten gas deliveries and France struggling to export electricity to its neighbor, the risks go beyond this winter.

"The challenges we're facing are enormous and they affect significant areas of the economy and society," Robert Habeck, Germany's vice chancellor and economy minister, said after unveiling a plan to pass on cost increases from energy companies to consumers. Rationing and recession are looming, and German authorities have voiced concern about social unrest if the energy shortage spins out of control. Germany can't count on France, where faulty nuclear reactors are compounding the energy crunch. Electricity prices in Europe's two biggest economies surged to records last week.

The cost increases add pressure on the poor. Around one-in-four Germans has slipped into energy poverty, meaning costs for heating and lighting affect their ability to pay other bills, according to the Cologne Institute for Economic Research.

Munich turns to coal and oil to replace natural gas

(Bloomberg; Aug. 1) - Munich plans to burn more oil and coal instead of natural gas as part of Germany's efforts to counter Russia's moves to squeeze deliveries of the fuel to Europe. Stadtwerke Muenchen, the Bavarian city's local utility, has revived oil burners at two heating plants that were previously shut. It also postponed the planned conversion of a power-generation block to gas from coal.

The moves mark a reversal of recent trends. European power producers have for years shifted away from burning fossil fuels to cut emissions, but the risk of gas shortages is forcing changes. Germany is facing an energy crisis this winter that would be unprecedented for a developed nation. Russia has gradually reduced deliveries of gas in evident retaliation over sanctions related to the war in Ukraine, making a recession more likely for Europe's largest economy.

Germany's gas-storage facilities are 68.6% full, well short of the country's target of 95% by Nov. 1. Nearly half of German households rely on gas for heating, while the fuel also plays a key role in a number of industrial sectors from chemicals to cement and glass making. Chancellor Olaf Scholz's government has asked companies and consumers to save energy to bridge the gap. If measures to rebalance supply and demand fail, the government has the power to declare a gas "emergency," which would involve the state taking control of distribution and deciding who gets the fuel and who doesn't.

Industry group says Germany could keep running nuclear plants

(Bloomberg; Aug. 1) - Germany's last remaining nuclear reactors could keep operating through the winter even though they are poised to close permanently by the end of this year, according to industry group Kerntechnik Deutschland. It's possible the three plants could generate power until spring in what's known as "stretch-out mode" that allows them to run at a reduced capacity, according to the lobby group. That way, they won't need new nuclear fuel supplies and would provide an alternative to scarce natural gas.

"It's not too late to keep the nuclear plants running for winter or to keep them running for a longer time," said Nicolas Wendler, a spokesperson for Kerntechnik Deutschland said on Aug. 1 in an interview. The option could potentially sway German politicians to extend the lives of the units as the energy crisis may only get worse with demand peaking during the winter. Germany's environment minister and member of Green Party, Steffi Lemke, signaled she's willing to consider extending the operating life of an EON nuclear plant in Bavaria into next year to boost much-needed electricity supplies.

Nuclear power accounted for about 12% of the nation's electricity last year, according to research group Ember. While a short-term extension could provide extra power this winter, it could also open the door to longer-term operations. Germany has been preparing to phase out nuclear power completely since it passed a bill in 2000 that tied the end of atomic power to the rise in renewables. That decision helped fund the growth of solar and wind power. Even after Russia restricted gas supplies, politicians first opted to increase dirty coal power capacity ahead of any commitment to extend nuclear.

German leader says keeping nuclear plants online 'could make sense'

(The Wall Street Journal; Aug. 3) - German Chancellor Olaf Scholz said for the first time that his government could postpone the planned closure of its remaining nuclear reactors, as he criticized a decision by Russia to constrain natural gas flows to Germany. The looming gas shortage has forced the German government to trigger emergency measures, raising the specter of gas rationing over the winter that could force factories to shut down and push Europe's largest economy into a recession.

On Aug. 2, the chancellor broke with a longstanding policy and said for the first time that it "could make sense" to keep Germany's last three nuclear reactors online. They are due to be shut down in December as part of the country's transition to renewable energy. Germany decided to phase out nuclear power over two decades ago, a plan that was greatly accelerated by former Chancellor Angela Merkel following the Fukushima nuclear plant disaster in Japan in 2011.

The three remaining reactors generate 6% of Germany's electricity. Plans to replace them with gas were upset by the economic war with Russia, Germany's main energy supplier. Scholz's government has commissioned a stress test for the nuclear plants to

determine whether their operations can be extended safely and whether it would help Germany's energy supply. The final decision whether to extend their life would be made once the study is completed, which could be in the coming days, the chancellor said.

Rolling power cuts in Bangladesh could continue without more LNG

(Bloomberg; Aug. 1) - Bangladesh faces another three years of rolling power cuts as the nation struggles to buy long-term supplies of natural gas and is priced out of spot markets. The country stopped purchasing spot liquefied natural gas cargoes in June because of volatile prices, and is considering sourcing more long-term supplies, Nasrul Hamid, the state minister for power, energy and mineral resources, said. However, producers have indicated new contract supplies are not available until 2026, he said.

A global shortage of the power-generation fuel that's been exacerbated by Russia's invasion of Ukraine has doubled spot prices for LNG in Asia and fueled frantic restocking in Europe, leaving little supply for emerging economies such as Bangladesh and Pakistan. With few alternatives, rolling power cuts are likely to put a drag on economic growth in the next few years, according to traders and analysts.

South Asian nations that are highly reliant on energy imports have been hit by surging prices, forcing cities to cut electricity supplies to cope with fewer imports. Bangladesh imported about 30% of its LNG on a spot basis this year, down from more than 40% last year, according to BloombergNEF. With elevated energy prices putting a strain on dollar reserves, Bangladesh is seeking support from creditors, including the International Monetary Fund, to fortify its finances.

Indian supplier starts rationing gas as Russia fails to deliver LNG

(Reuters; Aug. 1) - India's largest gas distributor GAIL (India) has started gas rationing, cutting supplies to fertilizer and industrial clients after imports fell short under its deal with a former unit of Russian energy giant Gazprom, two sources familiar with the matter said. Reduced gas supplies will affect India's urea production, and a sustained cut would force more imports of the soil nutrient, a fertilizer industry source said.

Gazprom Marketing and Trading Singapore has failed to deliver some liquefied natural gas cargoes to GAIL and has said it may not be able to meet supplies under their long-term deal. GAIL, which imports and distributes gas and also operates India's largest gas pipeline network, has cut supplies to some fertilizer plants by 10% and restricted gas sales to industrial clients by 10% to 20%, the sources said.

The state-run company is operating its petrochemical complex at Pata in northern India at about 60% capacity to save gas for other clients, they said. An industrial consumer

said GAIL has restricted its gas quantities to the lowest level at which it can avoid contract penalties. "We don't know where else we can cut supplies. ... Indian customers cannot afford costly spot gas," a source said. Last month GAIL bought a spot LNG cargo at \$38 per million Btu for August loading, well above the level at which it was getting gas under its deal with Gazprom, at about \$12 to \$14.

High LNG prices lead to power shortages in developing Asian nations

(Nikkei Asia; Aug. 3) - Prices for liquefied natural gas on the Asian spot market have surged nearly 10 times from average summer rates, causing crippling shortages in emerging nations strapped for foreign currency. Spot prices for LNG bound for Japan, South Korea and other major Asian economies now hover in the upper \$40 range per million Btu. On July 27, the price briefly topped \$50, a high not seen since early March, right after Russia invaded Ukraine. Because demand typically peaks in winter, the spot rates are usually cheaper in the summer, averaging about \$5 through 2019.

High prices have had a profound for emerging nations that lack deep foreign exchange reserves. Pakistan imported 4.25 million tonnes of LNG between January and July, according to the data firm Kepler, down 18% from a year earlier. In addition, Pakistan gave up on taking bids for 10 LNG cargoes scheduled for import between July and September due to soaring prices. Pakistan "cannot afford" to purchase LNG at a high price given limited foreign reserves allocated for fuels, Pakistani Prime Minister Shehbaz Sharif said during a meeting to address the energy situation last month.

With the exception of India, where coal makes up much of the power generating mix, a decrease in gas imports will directly lead to power crises, said Yutaka Shirakawa, project director at the Japan Oil, Gas and Metals National Corp. Extended power outages that can last for half a day are affecting many parts of Bangladesh and Pakistan. Gas shortages and power crunches hit hard at local industries. In Pakistan's textile industry, output volume reportedly crashed by more than half last month due to diminished gas supplies, causing at least \$1 billion in losses.

Eni planning second LNG production vessel in Mozambique

(Bloomberg; Aug. 2) - Eni is planning a second liquefied natural gas production vessel offshore Mozambique that could be built in less than four years to help Europe diversify supplies of the fuel, according to a company executive. The Italian oil and gas producer's potential project would complement its \$7 billion Coral-Sul LNG vessel moored off Mozambique's northern coast that's scheduled to start exports this year. The floating installation is planned for an annual production capacity of 3.4 million tonnes.

If Eni decides to proceed by early 2023, output from a second offshore facility could begin before TotalEnergies' \$20 billion onshore project that abruptly halted construction last year due to security issues. For Mozambique, a second floating LNG operation would help boost gas exports slowed by multiple delays. "This is a great opportunity, to develop resources and bring significant revenues," Guido Brusco, Eni's chief operating officer of natural resources said in an online interview with Bloomberg last week.

Before reaching a final investment decision, the company will need to agree to with partners including ExxonMobil, China National Petroleum Corp. and Mozambican stateowned Empresa Nacional de Hidrocarbonetos. Coral-Sul has remained on schedule for first exports this year despite supply-chain lags caused by the pandemic. Located more than 31 miles offshore, it's also been unaffected by an insurgency linked to Islamic State that led TotalEnergies to freeze work last year on an onshore project that's planned to have almost four times the capacity of the floating liquefaction plant.

OPEC+ decides on small production increase

(Reuters; Aug. 3) - OPEC+ is set to raise its output goal by 100,000 barrels per day, an amount analysts said was a setback to President Joe Biden after his trip to Saudi Arabia to ask the producer group leader to pump more to help the U.S. and global economy. The increase, equivalent to 0.1% of global demand, follows weeks of speculation that Biden's trip to the Middle East and Washington's clearance of missile defense system sales to Riyadh and the United Arab Emirates would bring more oil to the world market.

"That is so little as to be meaningless. From a physical standpoint, it is a marginal blip. As a political gesture, it is almost insulting," said Raad Alkadiri, managing director for energy, climate, and sustainability at Eurasia Group. The Organization of the Petroleum Exporting Countries and its allies, led by Russia, a group known as OPEC+ that formed in 2017, had been raising output targets by 430,000 to 650,000 barrels per day a month, as they unwound supply cuts imposed when pandemic lockdowns stifled demand.

They have, however, struggled to meet targets as most members have exhausted their output potential following years of under-investment in new capacity. Combined with disruption linked to Russia's invasion of Ukraine, the lack of spare supply has driven up energy markets and spurred inflation. OPEC+, which will next meet on Sept. 5, said in a statement that limited spare capacity requires it to be used with great caution in response to severe supply disruptions. It also said a chronic lack of investment in the oil sector will impact adequate supply to meet growing demand beyond 2023.

OPEC oil production climbs to 2-year high in July

(Bloomberg; Aug. 2) - OPEC's oil production rose to a two-year high last month as members followed through on a pledge to relieve tight global markets. The Organization of the Petroleum Exporting Countries added 270,000 barrels a day in July, with Saudi Arabia accounting for about two-thirds of the increase. OPEC and its partners have agreed to bring back all of the supplies halted during the pandemic, as summer demand and global output disruptions push prices to levels that threaten the global economy.

Saudi Arabia bolstered output by 180,000 barrels day to 10.78 million barrels a day in July, the highest since April 2020, and a level rarely seen in the kingdom's decades as an oil exporter. The United Arab Emirates and Kuwait also added substantial volumes, the survey showed. Abu Dhabi raised output to 3.24 million barrels a day, or 113,000 a day more than permitted under the OPEC+ deal. Libya appeared to be on a tentative path to recovery following an agreement to reopen its ports.

The extra crude from the Gulf helped compensate for setbacks elsewhere. The 270,000 barrels represent about two-thirds of the increase OPEC should have made, according to its deal to boost supplies. Hobbled by inadequate investment, political instability and sanctions, most OPEC+ nations lag far behind their targets. Angola and Nigeria — two members suffering the most acute supply shortfalls — saw their output decline again in July, as did Iran, which remains locked in stalled nuclear talks to ease U.S. sanctions.

EPA will fly over Permian wells, looking for methane leaks

(Argus Media; Aug. 2) - The U.S. Environmental Protection Agency said it is using helicopter flights over the next two weeks to search for leaks of methane and other gasses from oil and gas facilities in the Permian Basin. The helicopters are equipped with infrared cameras that can find hydrocarbon leaks from thousands of oil and gas operations in New Mexico and Texas. EPA said if it finds evidence of excessive leaks, it will follow up and consider potential enforcement actions such as fines, corrective actions and monitoring. The flights will continue through Aug. 15, EPA said.

The Permian produced nearly 5.4 million barrels per day of crude last month, equivalent to 45% of U.S. oil output, according to the U.S. Energy Information Administration. Past aerial surveys have found that a small number of "super-emitters" are responsible for a disproportionate share of the region's emissions of methane, a greenhouse gas, and ozone-forming volatile organic compounds.

"The flyovers are vital to identifying which facilities are responsible for the bulk of these emissions and therefore where reductions are most urgently needed," EPA Region 6 administrator Earthea Nance said. EPA said it previously used flyovers of the Permian to search for leaks in 2019. U.S. oil and gas operators have been required to look for

methane leaks and install low-emissions equipment at new facilities since mid-2016. The agency is developing methane rules for existing oil and gas facilities.

Debris clog filters in key gas line from U.K. to European continent

(Bloomberg; Aug. 3) - Dust and mud are clogging the filters on a key pipeline sending natural gas from the U.K. to Europe, slowing down flows as the winter crunch time approaches. The operator of the link between Britain and Belgium has removed large amounts of dust and pieces of debris as well as thick liquid this year from the filters that the gas passes through, according to a document posted online. Flows of gas have been reduced and even halted because of these blockages 24 times so far in 2022, while typically filter changes are needed only twice a year.

Britain has been exporting a record amount of gas to the continent this year as cargoes of imported liquefied natural gas arrive at its terminals. The U.K. lacks capacity to store the gas for winter. Besides, it fetches a price about one-third higher in mainland Europe, attracting flows in that direction. That's fine for now when demand is low, but when the weather turns cold Britain will need imports from Belgium and the Netherlands.

Gas contamination isn't uncommon for pipelines but the amount of erroneous material has increased significantly as the flows to Europe have grown. The constraints have already cost gas shippers about £270 million (\$330 million), the operator Interconnector Ltd. said. Flows have run as high as 2.6 billion cubic feet per day for several months. The filters have caught 992 pounds of solids as well as 66 gallons of liquid. This can be produced when the gas is extracted or can flake off from inside the pipeline itself.

Agency recommends Australia tighten exports to keep gas at home

(Bloomberg; Aug. 1) – Australia, one of the world's top LNG suppliers, should tighten measures to curb its natural gas exports to avoid a domestic fuel crunch, according to the nation's competition watchdog. Gas that hasn't been sold under long-term contracts should be made available domestically before it is exported because of a significant risk of a supply shortfall next year to eastern Australia, home to about four-fifths of the nation's population, the Australian Competition and Consumer Commission said Aug. 1.

Eastern areas could face a shortage equivalent to 10% of gas demand, mainly the result of increased consumption by electricity generators as the nation transitions away from coal. Australia's government is already considering extending to 2030 powers that would allow it to impose export controls in some extraordinary circumstances and which had been due to expire in January, Resources Minister Madeleine King said Aug. 1.

"The government needs to see firm commitments out of the East Coast LNG exporters," King said. A call on LNG exporters to respond more to domestic needs is unlikely to have any major global impact on supply or prices. The forecast deficit next year in eastern Australia is equivalent to about 14 LNG cargoes, while Australia's terminals shipped more than 100 cargoes in June alone. Australia has grappled with a power supply crunch this year despite being among the top global exporters of both coal and gas. A cold snap and breakdowns at aging power plants have led to a spike in demand.

Australia needs common sense solution to gas pricing

(Reuters commentary; Aug. 2) - Australia's threat to curb exports of liquefied natural gas in order to ensure domestic supplies is another unwelcome pressure on a tight global market for the fuel. What needs to be addressed effectively is the elephant in the room, namely the price at which natural gas is made available to domestic consumers relative to the price the gas producers can receive for their LNG on the global market.

The issue is that the gas companies, no matter what public relations spin they may put on it, want to sell at the highest possible price. If domestic users are prepared to pay the equivalent of international LNG prices, it's likely the companies would be fairly agnostic as to who they sell to. The problem is that domestic buyers will almost certainly say gas at a price close to export LNG parity is unaffordable, and will render businesses such as glass making and other industrial manufacturing uncompetitive against imports.

Residential consumers, also facing massive increases in energy bills, are likely to balk at export-parity pricing, and put pressure on politicians to ensure gas and electricity are cheaper. Throw in extensive media reporting on the relatively small amounts of tax paid by the major oil and gas companies, especially relative to their revenue, and you have a fairly toxic domestic situation where emotion often gets the better of common sense. What is needed, in addition to a commitment to supply the domestic market, is a system of price caps that ensures that consumers don't face unexpected jumps in energy bills.

East Timor, Woodside continue sparring over offshore gas field

(Australian Financial Review; Aug. 1) - A confidential report prepared for the East Timor government advises that the liquefaction plant for the stalled Greater Sunrise gas project to be operated by Woodside Petroleum in waters north of Australia can be built and run at a similar cost in East Timor, instead of Darwin. The updated cost in a secret energy consultant report contrasts to Australian-listed Woodside's insistence that building the liquefied natural gas plant in Darwin is the only commercially viable option.

Energy industry experts believe the Sunrise gas could be used as backfill for the 4-yearold Ichthys LNG plant off the coast of Western Australia or supply a second liquefaction train at Darwin LNG in northern Australia after 2030 — either option being cheaper than piping the gas across a deep undersea trench and building an LNG plant in East Timor. The proposed project in the Timor Sea is operated by Woodside but is 57% owned by the East Timor government after it bought out Shell and ConocoPhillips in 2018.

Leaked details of the ERCE consultancy report, commissioned by the East Timor government-owned energy company Timor Gap, come amid tense negotiations between Woodside and East Timor about production-sharing and royalty agreements that are expected to be signed this year. There is speculation that East Timor could consider dumping Woodside as its joint-venture partner and operator of the delayed project if the company continues to insist the LNG plant can only be built in Darwin.

Texas yard delivers first LNG-fueled container ship for Hawaii route

(PortNews; July 31) - Keppel Offshore & Marine, through its wholly owned subsidiary, Keppel AmFELS, has delivered the first of two newbuild liquefied natural gas-fueled container ships to Pasha Hawaii, a leading shipping and logistics company serving the islands. The George III will join Pasha Hawaii's fleet serving the Hawaii/mainland trade route. Built at Keppel O&M's shipyard in Brownsville, Texas, the 774-foot-long vessel is able to carry 2,525 20-foot shipping containers.

The Janet Marie, the second LNG-fueled containership Keppel is building for Pasha Hawaii, is scheduled for delivery later this year. Keppel said they will be two of the first LNG-powered vessels to serve the U.S. West Coast. Pasha Hawaii operates out of the marine terminals at Oakland and Long Beach, California. The ships will run completely on LNG fuel, reducing their environmental impact and surpassing the International Maritime Organization 2030 emission standards for ocean vessels, Keppel said.