

LNG Unlimited

LNG JOURNAL PUBLICATION

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Warren Buffett natural gas and LNG deal puts spotlight on top feed-gas suppliers

Berkshire Hathaway's \$9.7Bln Dominion purchase boosts other Gulf Coast values
LNG Journal editor

The deal by Warren Buffett's Berkshire Hathaway Energy unit to purchase Dominion Energy's natural gas and storage assets and part of the Cove Point liquefied natural gas plant for \$9.7 billion has boosted the underlying value of infrastructure and LNG feed-gas companies as service suppliers to LNG plants and projects along the Gulf Coast and in Canada.

After making Berkshire Hathaway's last acquisition almost four-and-a-half years ago Berkshire Hathaway Energy bought valuable parts of Dominion as the Virginia-based company moves into clean-energy generation, renewables and power storage.

Tangible

The tangible assets purchased for \$4Bln in cash and the assumption of \$5.7Bln in debt include Dominion's full stakes in Dominion Energy Transmission, Carolina Gas Transmission, and the Questar Pipeline, along with Dominion's 50 percent stake in the Iroquois Gas Transmission System.

All told, this works out to more than 7,700 miles of natural gas transmission pipeline.

Berkshire Hathaway Energy already owns companies like Northern Natural Gas and Kern River Gas Transmission.

With the addition of the Dominion assets, Berkshire Hathaway Energy will control 18 percent of all interstate natural gas transmission in the US, up from 8 percent previously.

The company will diversify its geography by expanding its reach



Oracle of Omaha's deal has had positive impact on asset values for the major pipeline and storage companies

in several eastern and western states of the US.

Berkshire Hathaway Energy also gains 900 billion cubic feet of storage and a 25 percent stake in the LNG export and storage facility at Cove Point on Chesapeake Bay in Maryland.

Dominion will retain a 50 percent ownership stake in Cove Point, with Brookfield Asset Management of Canada holding the remaining 25 percent stake.

Analysts say that the acquisition gives more underlying value to North American natural gas infrastructure companies such as Enbridge Inc., which back in February 2020 agreed to buy the feed-gas pipeline for the Rio Grande LNG export plant proposed by NextDecade Corp.

The Rio Bravo Pipeline will supply NextDecade's Rio Grande plant to be sited on the Brownsville Ship Channel in South Texas.

The Rio Grande venture will export around 27 million tonnes per annum of production and its associated Rio Bravo Pipeline will transport 4.5 billion cubic feet per day of feed-gas from the Agua Dulce natural gas hub in Texas.

Analysts noted that Buffett prefers to make acquisitions during times of concern or panic.

With the oil and gas sector going through an historic downturn that has seen more than 20 North American producers file for bankruptcy protection in 2020, Buffett moved in to make a deal on terms that were favourable to Berkshire Hathaway and its shareholders.

Buffett's deal has spotlighted more future value in LNG projects on the US Gulf Coast and in Western Canada and in the feed-gas suppliers. These companies such as Enbridge Inc., TC Energy and Kinder Morgan will lead the way in getting the North American gas surplus into ships as LNG for export.

Among this small group of pipeline companies, Enbridge is a North American infrastructure leader and like Kinder Morgan and TC Energy it has a large gas pipeline business and stable earnings.

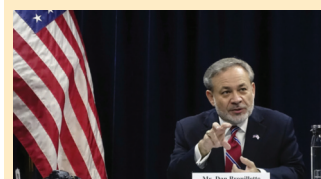
Specifically, a company like Enbridge generates about 40 percent of its gross earnings from its gas transmission, distribution and storage operations.

Quality

These quality assets help contribute to Enbridge's diversified earnings from more than 40 sources, including refiners, utilities and integrated producers.

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Final US permit is awarded to Jordan Cove LNG export project in boost for northwest state of Oregon

LNG Journal editor

The US Secretary of Energy Dan Brouillette has issued a final long-term order authorizing the export of domestically produced liquefied natural gas from the proposed Jordan Cove LNG Terminal at Coos Bay in the northwest state of Oregon.

The export permit, which had previously been conditional, follows the approval by the Federal Energy Regulatory Commission announced March 2020 for the siting, construction, and operation of the Jordan Cove liquefaction plant and the related Pacific Connector Pipeline.

Top supplier

"The export authorization for Jordan Cove, the first US West Coast LNG project, will ease access to further position the US as a top supplier of LNG around the world," said Secretary Brouillette.

"The issuance to Jordan Cove serves to further expand opportunities for US LNG abroad, particularly in the growing markets of Asia, and encapsulates what the Trump Administration has been working hard on for the past three



US Energy Secretary Brouillette is helping LNG build-out

years - providing reliable, affordable, and cleaner-burning natural gas to our allies around the world," stated Brouillette.

The development company, the Jordan Cove Energy Project is owned by Canada's Pembina Pipeline Corp. and it now has the authority to export up to 1.08 billion cubic feet per day of natural gas as LNG.

The DoE statement said the project's natural gas will be sourced from both Canada and the United States and would be liquefied at the Jordan Cove facility for export to any nation worldwide, unless trade is prohibited by US law.

Calgary, Alberta-based Pembina

acquired the Jordan Cove LNG project in late 2017 in its takeover of another Canadian company, Veresen Inc.

The project includes a 230-mile pipeline which would traverse four counties in Southern Oregon on the route to the liquefaction plant.

The liquefaction plant and other facilities are planned for a 200-acre site and comprise five small-scale Trains each with 1.5 million tonnes per annum of output for a total of 7.8 MTPA.

"As we work to overcome the Covid-19 pandemic, LNG exports are going to be one of the building blocks toward the United States' economic recovery," said DOE's

Assistant Secretary for Fossil Energy Steven Winberg.

"The US has exported LNG to 38 countries, with this authorization to Jordan Cove, the United States can look to increase that number with expanded geographic coverage for LNG exports into key importing markets in Asia, providing enhanced economic opportunities both here in the US and globally," added Winberg.

Jordan Cove has multiple facilities, including two full-containment storage tanks with total capacity of 320,000 cubic metres, gas treating infrastructure, an export jetty and access to more than 25 billion cubic feet per day of gas supply from Western Canada and the US Rockies.

The project's Pacific Connector pipeline will have a 36-inch diameter with capacity to transport up to 1.2 billion cubic feet of natural gas per day.

Feed-gas for Jordan Cove would be sourced at the Malin Hub, creating a new outlet for natural gas from areas such as the Rockies Basin.

LNG shipment cancellations from Gulf Coast will be offset for production by rise in pipeline gas for Mexico

The cancellation of LNG cargoes from Gulf Coast export plants amid over-supply and a price collapse is set to be offset by an increase in pipeline exports to Mexico, the largest component of US natural gas trade and a key take-away portion of still high production levels.

These pipeline exports will rise with the completion of the southern-most segment of the Waha-lajara system, the Villa de Reyes-Aguascalientes-Guadalajara (VAG) pipeline, according to a report from the US Energy Information Administration.

The VAG pipeline began operations in June 2020, connecting new demand markets in Mexico to

US natural gas pipeline exports.

"Exports of natural gas to Mexico by pipeline are the largest component of US natural gas trade, accounting for 40 percent of all US gross natural gas exports in 2019," the EIA report noted.

Mexico also remains the second-largest recipient after South Korea of US LNG shipments.

Since the Cheniere Energy Sabine Pass plant came on stream in February 2016, the Mexicans have received over 150 US LNG shipments.

However, in recent months LNG deliveries to Mexico have fallen after exports to China resumed and more cargoes in the over-supplied

market were pointed at Japan and India, as well as European nations, even at historically low prices.

The Waha-lajara system is a group of new pipelines that connects the Waha hub in western Texas, a major supply hub for Permian Basin natural gas producers, to Guadalajara and other population centres in west-central Mexico.

"With the 0.89 billion cubic feet per day (Bcf/d) VAG pipeline entering service, EIA expects utilization of the Waha-lajara system to quickly ramp up, resulting in increased US natural gas exports to Mexico out of western Texas and additional take-away capacity out of the Permian Basin," explained the EIA.

After the Sur de Texas-Tuxpan pipeline was completed in September 2019, natural gas exports to Mexico reached a record 5.5 billion cubic feet per day in October 2019.

Exports on this line from the border at Brownsville in Texas to the southeastern state of Veracruz in Mexico averaged 0.6 Bcf/d during the last quarter of 2019, or about 20 percent of the pipeline's capacity.

Overall natural gas exports from this region only increased by 0.2 Bcf/d from 2016 to 2019 because of delays in pipeline construction in Mexico.

Japan spot prices rise from previous record lows

Japanese contracted spot LNG cargo prices for June rose to \$3.80 per million British thermal units after falling to a record low of \$2.20 per MMBtu in the previous month of May, though are still well down on June 2019 when they were valued at \$5.50 per MMBtu.

Spot cargoes delivered to Japan in June were also priced at \$3.80 per MMBtu versus \$2.60 per MMBtu in the previous month and cost almost half the price of \$7.50 per MMBtu prevailing in June 2019, according to the data from the Japanese Ministry of Economy, Trade and Industry Ministry.

The monthly spot cargo numbers come from the Ministry's commerce division and are only issued if a minimum number of two trades are recorded.

"Delivery conditions of prices (prior to averaging) are all converted into the equivalent delivery ex-ship (DES) basis," said the METI division.

"Prices are the simple average (rounded to the first decimal place) of all contract-based (or arrival-based) prices of spot LNG in Japan (not weighted averages)," it explained.

Overall Japanese LNG imports plunged by almost 19 per cent to 4.51 million tonnes from 5.56MT in May 2019 as the government implemented restrictions for the Covid-19 pandemic.

The May volumes amounted to around 65 cargoes compared with 80 cargoes the previous month and the normal level of deliveries at the start of 2020 of around 100 cargoes.

The latest monthly shipments cost 236.66 billion yen (\$2.20Bln), 22.2 per cent less than the May 2019 import bill of \$304.86Bln yen (\$2.83Bln), according to the latest monthly trade figures from the Japanese Finance Ministry.

Ice-class LNG carriers continue NSR shuttle service to Asia

LNG Journal editor

Shipments of LNG are continuing unabated on a small fleet of Arc-7 ice-class carriers from the Russian Yamal export plant in northern Siberia along the Northern Sea Route to North Asian destinations such as China and Taiwan.

The next carrier to deliver Russian LNG to Asia will be the 172,000 cubic metres capacity "Georgiy Brusilov" which is currently enroute to the Yung-An import terminal in Taiwan with a July cargo.

The Yamal plant has three liquefaction Trains on stream, each with nameplate capacity of 5.5 million tonnes per annum.

Fourth Train

A smaller fourth Train at Yamal is currently being completed and will produce 900,000 tonnes per annum, taking overall production to 17.4 MTPA.

All the LNG vessels of around 172,000 cubic metres capacity are part of a fleet of 15 Arc7 carriers



'Vladimir Voronin' delivered cargo to China's Tianjin terminal

that shuttle to and from Sabetta for natural gas company Novatek and its Yamal joint venture partners, including French major Total and China National Petroleum Corp.

LNG shipments from the Yamal port make up most of the energy shipping traffic along the NSR and numbers have been rising since the summer season's first east-bound voyage by the carrier, the "Christophe de Margerie", to the port of Jiangsu.

The "Christophe de Margerie" was followed by the "Vladimir

Voronin", an LNG carrier that sailed across parts of the route without icebreaker escorts.

The "Christophe de Margerie" is again heading back to Sabetta from the Chinese port of Yangkou to lift another cargo at the Yamal loading facilities and is scheduled to arrive on July 13, according to shipping data.

On its westbound voyage, the "Christophe de Margerie" encountered the carrier "Georgiy Brusilov" which is currently heading for Taiwan.

Denmark opens way for pipe-lay ships to complete Nord Stream II

Denmark has opened the way for the completion of the Russian-led Nord Stream II pipeline natural gas project for Western Europe to compete with LNG after previous delays caused by threats of US sanctions.

Construction of the 1,230-kilometres pipeline is almost complete, apart for a final stretch of around 120 kilometres in length in Danish waters.

The Danish Energy Agency said it would allow the Gazprom-led project to use Russian-flagged pipe-laying vessels with anchors instead of the more advanced ships using self-positioning technology and which are affected by US sanctions imposed in December 2019.

The US considers the Nord Stream II project a security risk to

Europe, though both Russia and most European Union members have condemned Washington's sanctions.

Germany is the main EU supporter of Nord Stream II and has been accused by several EU members, including Poland, of encouraging the EU energy security policy of building LNG import terminals to reduce dependence on Russian pipeline gas while encouraging the new Gazprom pipeline project to supply Western Europe.

Nord Stream II also bypasses EU LNG importers Poland and Lithuania, as well as the traditional pipeline transit nation Ukraine, on its route under the Baltic Sea from the Russian port of Ust-Luga, near St Petersburg, to Greifswald in northeast Germany.

The Swiss-Dutch subsea company Allseas, which was laying the dual pipelines using two vessels, the "Pioneering Spirit" and the "Solitaire", halted its work to avoid US sanctions.

With Allseas leaving the project, the Russians have taken over and President Vladimir Putin assured the Russian public that the pipeline would be completed without international assistance.

The Nord Stream II project's two parallel pipelines will be able to transport 55 billion cubic metres per annum of natural gas from Russia to Germany. After starting in Russian waters, the pipelines pass through Finnish, Swedish, Danish and German marine areas before making their landfall in Germany.

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NEWS NUDGES

BP deal in Guangdong

BP signed a supply agreement for regasified LNG with China's ENN Group in support of the growing energy needs of the southern province of Guangdong. Under the terms of the agreement, BP will provide ENN with 300,000 tonnes per annum of pipeline gas regasified from LNG for a period of two years from January 2021. The LNG will be received and regasified through the receiving terminal of Guangdong Dapeng LNG where BP holds regasification capacity.

Henry Hub forecasts

The US Henry Hub natural gas spot price averaged \$1.63 per million British thermal units in June, the lowest inflation-adjusted price going back to at least 1989, as a result of low demand, the Energy Information Administration said in its short-term outlook. However, the EIA expects falling production will put upward pressure on natural gas prices through the end of 2021. It forecasts that Henry Hub spot prices will average \$1.93 per MMBtu in 2020 and \$3.10 per MMBtu in 2021.

Charter rates steady

Shipping charter rates for LNG carriers in the spot market are little changed over the past week. Rates were quoted at an average of between \$33,000 per day and \$35,000 per day West of Suez and at rates of between \$29,000 per day and \$32,000 per day East of Suez for vessels of between 155,000-165,000 cubic metres capacity, according to various brokers. One-year time charters were steady for the most modern vessels and were seen at rates of around \$44,000 per day.

Woodside technical moves at Pluto plant help achieve record

LNG Journal editor

Woodside Energy, the Western Australian liquefied natural gas plant operator, has highlighted the record-breaking production achieved in 2020 at its Pluto LNG plant amid the worst cyclone to hit the Burrup Peninsula in half a century and the impact of the Covid-19 pandemic.

The single-Train Pluto plant, located near Karratha, has delivered around 2.6 percent more LNG than in the previous year.

Gas fields

The facility processes feed gas from the two offshore Pluto and Xena gas fields and will be the centre of LNG expansion by Woodside when a second processing Train is built.

Pluto asset manager Yvette Manolas attributes the excellent result to the improvements made at the start of the year.

"Shared resources and knowledge across all of Woodside's operational sites contributed to this outcome and highlighted the value



Facility has improved boil-off gas compressor operations

of working together as one Burrup Hub to achieve excellence," explained Manolas.

Record production was achieved through implementation of several long-term projects aimed at energy efficiency and minimising environmental impacts, while also maximising LNG production.

One project was the execution of the dual boil-off gas (BOG) compressor operation.

While Woodside aims to minimise flaring, it is essential for the safe operation of a gas plant.

During ship-loading operations, a portion of the LNG vaporises when it encounters the relatively

warm LNG carrier. A newly commissioned operating mode has significantly increased the ability to capture this vapour and direct it to the fuel gas system, or to recover the excess vapour to be processed into LNG.

"Through the work of a multi-disciplinary team including Operations, Engineering, Maintenance and Marketing, along with the support of specialist vendors, this operating mode is expected to result in an average reduction in Pluto's annual flaring of about 20 percent, as well as increasing production capacity," said Woodside.

Utility AGL Energy proceeds with LNG terminal plan at Crib Point

Australian utility AGL Energy is progressing with the LNG import terminal and has submitted for public comment its environmental impact statement for the facility at Crib Point on Westernport Bay, south of Melbourne in the state of Victoria.

The AGL environmental statement will be open for public comment until the 26th of August 2020.

Subject to clearance, AGL hopes to make a final investment decision on the Crib Point project around the end of this year.

A second LNG project aimed at bringing in more natural gas to another area of the nation threatened with gas supply shortages in

the southeast is being developed by Australian Industrial Energy (AIE) in the state of New South Wales at Port Kembla, south of Sydney.

The Crib Point project in Victoria has a price tag of A\$300 million (US\$208M) and involves a floating terminal moored at a newly constructed jetty for LNG carriers making deliveries.

The venture also includes a 55-kilometres natural gas pipeline to the Melbourne satellite town of Pakenham to connect to the Victorian gas grid.

AGL said construction could begin in 2021 and the project brought on stream by 2023, in time to help meet the shortfall of

gas supply forecast for Australia's southeast market.

The project faces opposition from environmental groups as well as residents concerned about potential risks to the Westernport region's tourism.

The Crib Point proposal requires approval from both the Victorian state government and the federal government in Canberra.

The AGL plan is one of two similar projects proposed in Victoria following Viva Energy's announcement in June 2020 of its ambitions to transform the site of its Geelong oil refinery into an energy hub that would include an LNG import capability.

Cryopeak LNG delivers largest ever truck load to remote community in Canada's Northwest Territories

LNG Journal editor

Cryopeak LNG Solutions Corp. has completed the largest ever delivery of liquefied natural gas by truck in the Canadian Northwest Territories with the vehicle being driven over 3,000 kilometres to reach a power plant located in a town inside the Arctic Circle.

The LNG was delivered to the town of Inuvik and to a plant owned by Northwest Territories Power Corp. where LNG supports the primary fuel for electricity services for the northern community.

Power

The delivery is in line with the continued focus of NTPC to make low-carbon electricity available across the Northern Territories.

Cryopeak has been transporting LNG to Inuvik for three years. The town is located 2 degrees above the Arctic Circle on the Mackenzie River and Delta and is home to the Inuvialuit and Gwich'in peoples as well as other residents.

The shipment of LNG totaled around 18,000 gallons and was made possible by Cryopeak's proprietary "Super B-Train" transportation trailer.

"Cryopeak's mission is to pro-



Super B-Train after loading at company's Fort Nelson plant

vide LNG to remote locations in the most reliable, sustainable and economic manner possible," said the company, which is based in Richmond, British Columbia.

"The Super B-Train and Cryopeak's LNG production facility in Fort Nelson, BC, are critical pieces towards realizing this mission," it added.

Cryopeak said its primary focus in the remote North is to provide reliable low-carbon fuel to serve mining, industrial heating and power generation.

"It was an incredible journey, both manning the truck, and seeing how far Cryopeak has come in the ability to deliver clean, affordable and reliable natural gas to serve the region," said Blair Mease, who drove the B-Train the

3,729 kilometres from point of loading to delivery.

The previous largest truck delivery was in February 2020 to a small-scale power plant at the Silvertip mine on the Yukon-BC border owned by Coeur Silvertip Holdings Ltd.

Cryopeak noted that the Super B-Train is designed with up to 70 percent greater load capacity than standard trailers currently operating in Canada, improving LNG's competitiveness as a fuel source for remote locations.

Understanding that transportation often represents the largest cost of LNG for customers and NTPC was eager to work with Cryopeak on this supply initiative.

"The Government of the Northwest Territories is committed to

finding ways to reduce the cost of living for its residents, and we continue to collaborate with the NTPC to look for innovative solutions to do just that," said Katrina Nokleby, the local Minister of Infrastructure and Industry, Tourism and Investment.

"This delivery - the largest for liquefied natural gas this far north in Canada - marks an important step toward making lower carbon electricity available across the NWT," added the Minister.

Aleksandar Cook, senior vice president at Cryopeak said the company was proud of its latest achievement.

"It is the culmination of years of planning to deliver LNG in our Super B-Train to a community located 200km north of the Arctic Circle and approximately 100km from the Arctic Ocean," added Cook.

"It's a testament to the hard work and dedication of everyone in our Cryopeak team as well as the continued support and shared vision of our financial sponsor, BP Energy Partners," he stated, referring to the Dallas, Texas-based private equity firm with no ties to the UK oil and gas major of the same name.

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Golar Power enters deal for micro-scale LNG output

Golar Power, a joint venture partnership comprising Golar LNG and a US equity fund, has signed an agreement with Argentinian firm Galileo Technologies to expand its small-scale LNG activities in South America and focusing firstly on Brazil.

Golar LNG's partner in the power venture is Stonepeak Infrastructure Partners and they have been developing several large-scale LNG-for-power projects in northeast Brazil and are now turning to the small-scale sector in various states.

The deal with Galileo will enable Golar Power to develop a bio-LNG business based on biomethane.

The first Golar Power order from Galileo involves the supply of two micro-LNG plants to produce about 30 tonnes per day of LNG in a mature gas field in Bahia state, while the other will capture and liquefy biomethane from landfills in Sao Paulo state, with capacity to produce up to 15 tonnes per day of bio-LNG.

Golar Power said these projects are designed to take fill gaps in Brazil's gas pipeline network and take natural gas to regions that lack connections.

Brazil has a low ratio of natural gas pipelines with only 9,409 kilometres of pipelines compared to 30,000km in neighbouring Argentina.

"Only 5 percent of Brazilian municipalities are served by gas pipelines," said Golar Power Vice-President in Brazil, Marcelo Rodrigues. "Our challenge is to take natural gas to those places," added Rodrigues.

Biomethane projects in Brazil are also expected to take advantage of the new regulatory framework for sanitation, approved by Congress in late June 2020.

OPEC of natural gas outlines key role of LNG at UN event

LNG Journal editor

The Gas Exporting Countries Forum (GECF), based in Qatar and known as the OPEC of natural gas, and the International Gas Union were among the participants in a wide-ranging online discussion held by the United Nations Economic Commission for Europe (UNECE) on future LNG and pipeline gas use.

The Web gathering was entitled "99 minutes of LNG - trends, developments and innovative" and examined the need for a more vibrant natural gas industry due to the long-term benefits it brings and its key role in the energy transition.

Organisers

The session was organised by the UNECE's Group of Experts on Gas and featured speakers from the GECF and the IGU in addition to several UN member states and for leading gas companies from 10 nations, including Germany, Indonesia, the Netherlands, Nigeria, Norway, Russia and the US.

The GECF was represented by Hussein Moghaddam, Senior En-



Gas Exporting Countries Forum spoke of LNG benefits

ergy Forecast Analyst at the Secretariat in the Qatari capital, Doha.

Moghaddam presented the latest data on Covid-19's impact on LNG markets and outlined the long-term prospects for the fuel.

The GECF has 12 members: Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago, the United Arab Emirates and Venezuela.

The seven observer-status countries are Angola, Azerbaijan, Iraq, Kazakhstan, Norway, Oman and Peru.

The current Secretary-General of the GECF is Yuri Sentyurin from Russia.

During the UNECE's event Moghaddam spoke in relation to one of the key messages which was that despite the current market environment due to Covid-19 and the oil price slump, the LNG industry was better placed than ever because of its massive contribution to decarbonising the world.

"While coal is still considered a critical source for energy security and affordability, particularly in Asia, coal development plans are being revised downward compared to previous years amidst low electricity demand and rising availability of alternative sources," said Moghaddam.

New Fortress agrees halt in cargos from Centrica of UK

New Fortress Energy, the developer of liquefied natural gas and power projects in Latin America and the Caribbean with new LNG import projects in Nicaragua and Mexico, said the company entered into a temporary supply termination agreement with the LNG subsidiary of UK utility Centrica.

Centrica agreed to terminate New Fortress's obligation to purchase any additional LNG from Centrica for the remainder of 2020 in exchange for a payment of \$105 million.

The New York-based company said that as a result, New Fortress will now be able to purchase LNG in the open market at prices that

are significantly lower than the price previously agreed to with Centrica.

It added that as a result of facilities commencing operations in Puerto Rico in addition to Jamaica, New Fortress had made significant progress toward achieving its earnings goals of over \$400M on an annualized basis during the third quarter of 2020.

In addition, the company said it was currently advancing projects in both Mexico and Nicaragua with the goal of substantially completing them by the end of 2020.

Once fully operational, New Fortress aims for these projects to contribute an additional \$150M

towards operating income. Analysts said that Centrica supplies about three or four cargoes per annum to New Fortress under an agreement tied to the New Fortress supply of LNG to the Jamaica Public Services (JPS) gas-fired power plant near Montego Bay in Jamaica.

"Our flexibility to opportunistically purchase LNG at market prices completes our transition from a development company to an operating company that we expect will generate significant operating margin and cash flow," said Chief Executive and Chairman Wes Edens.



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Brazil's Petrobras plans to sell remaining stake in natural gas pipeline and looks at FLNG options

LNG Journal editor

Brazilian state-run oil and gas company Petroleo Brasileiro SA, known as Petrobras, has begun the binding phase in the sale process of its 10 percent remaining stake in gas pipeline firm Nova Transportadora do Sudeste (NTS) at the same time as reviving the possibility of floating LNG production.

"Potential buyers classified for this phase will receive an invitation letter with detailed instructions on the divestment process, including guidelines for carrying out due diligence and sending binding proposals," said Petrobras.

Streamlining

Petrobras said the transaction was in line with its strategy to streamline its portfolio and reorganize capital allocation.

NTS provides natural gas transportation in a network of 2,048 kilometres located in the nation's southeast and connecting Rio de Janeiro, São Paulo and Minas



Extensive oil and gas assets in Atlantic offshore Brazil

Gerais. The NTS system is also connected to the Bolivia-Brazil pipeline to the west and natural gas terminals to the east and south.

A group led by Canada's Brookfield Asset Management Inc., which in October 2019 bought a stake in the Cove Point LNG plant in Maryland, purchased 90 percent of NTS from Petrobras in 2016 for \$5.2 billion.

Petrobras also said it was

studying the possible development of several floating liquefaction plants to add an export component to the growing natural gas production from areas such as the offshore pre-salt Santos Basin.

Emissions and Climate Change Manager Viviana Coelho said during a Web conference that LNG production could be an alternative for the associated gas coming from Brazil's offshore oil fields about 250 kilometres southeast of Rio de Janeiro.

Petrobras currently relies on pipelines to bring natural gas produced offshore to the coast for processing and distribution.

The reservoirs, where oil and gas are trapped beneath a thick layer of salt in the Atlantic seabed, have supplied more than 65 percent of Brazil's production in just over a decade since their discovery.

A small portion of the gas is burned through flaring systems at the platforms and a significant portion is re-injected into to control reservoir pressure and increase oil production.

Petrobras first considered floating LNG production back in 2011 with the UK's BG Group, later taken over by Royal Dutch Shell.

The Brazilian company had been scheduled to hold a front-end engineering and design contest involving most of the world's main LNG engineering companies in 2012 but the process did not move forward.

Major LNG sector participant Eni will have \$4Bln of write-downs in next earnings for second quarter

Eni, the Italian energy company with widespread LNG interests, said it would write off around €3.5 billion euros (\$4Bln) from the value of its assets after revising down its long-term outlook for oil and gas prices.

Eni said it was cutting its 2023 long-term price assumption for North Sea Brent crude to \$60 a barrel from a previous \$70 and gas on the Italian hub to \$5.5 per million British thermal units from \$7.8 per MMBtu.

Milan-based Eni has been one of the most successful global exploration and production companies in recent years with major discoveries offshore nations such as Egypt and Mozambique.

Eni is leading a project for the Coral South floating LNG project

from Area 4 resources in the Rovuma Basin offshore Mozambique and is also part of an onshore project in the southeast African nation with ExxonMobil China National Petroleum Corp. and others.

"Our changed long-term assumptions, reached four months after the outbreak of the Covid-19 pandemic, reflect our current expectations about future prices and will be incorporated in our processes of capital allocation," explained Eni Chief Executive Claudio Descalzi.

The move follows similar write-downs by other global operators such as BP of the UK and Royal Dutch Shell.

The majors have suffered a twin blow in 2020 with the mid-March oil price plunge and the negative economic effects of Covid-19.

Eni said it expected post-tax impairment charges against non-current assets, including a devaluation of tax credits recorded in connection with tax-losses carry-forwards, of €3.5Bln, plus or minus 20 percent.

It said it would book the write-downs, most of them on upstream assets, in its second-quarter results.

It said it now forecast Brent at \$40, \$48 and \$55 per barrel in the period 2020-2022, respectively, from a previous \$45, \$55 and \$70 per barrel.

Earlier in 2020 Eni pledged to reduce its greenhouse gas emissions by 80 percent in one of the most ambitious clean-up strategies in an industry urged by investors to get involved in more projects to cope

with the effects of climate change.

The company said it was creating two new business groups, Natural Resources to develop the upstream oil and gas portfolio sustainably and Energy Evolution, dedicated to supporting the company's power generation and marketing.

Eni said it believed the overhaul would help the implementation of company strategy to 2050, combining value creation, portfolio sustainability and financial strength.

"The key and unique element of this strategy is the combination of growth objectives with financial value creation as well as environmental sustainability, which will lead to a significant reduction in full life-cycle carbon emissions," said Eni.