LNG Unlimited

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How Kinder Morgan assets tested LNG feed gas and pipeline resiliency

CEO Steve Kean said the strongest performance in quarter was result of actions after previous weather events

LNG News Editor

CEO Kean praised staff for strong quarterly performance

Kinder Morgan, the US natural gas pipeline operator and stakeholder in LNG exports and projects, reported first-quarter net income of $1.40 billion compared was a net loss of $306M in the prior-year quarter and said a new Louisiana pipeline expansion to serve Train 6 at Sabine Pass LNG was on track.

"The (profit) increases are primarily related to the February winter storm and are therefore largely non-recurring," stated Kinder Morgan.

Margins

"We realized greater margins on Kinder Morgan's Texas intrastate pipeline systems resulting from the temporary supply and demand imbalances and substantial spot market price volatility caused by the storm," explained the Houston-based company.

The earnings performance for the first quarter was also better due to $971M of impairment charges taken in the first quarter of 2020.

"Apart from the storm and throughout the quarter, our assets continued to provide strong cash flow as we remain guided by a sound corporate philosophy: fund our capital needs internally, maintain a healthy balance sheet and return excess cash to our shareholders " stated Kinder Morgan Executive Chairman Richard D. Kinder.

The company noted that construction continued on Kinder Morgan Louisiana Pipeline's Acadiana expansion project, which is costing $145M, and the work was on track.

"The project is designed to provide 945,000 dekatherms (cubic feet) per day (Dth/d) of capacity to serve Train 6 at Cheniere's Sabine Pass Liquefaction facility in Cameron Parish, Louisiana," said the company.

"The project is anticipated to be placed into commercial service as early as the first quarter of 2022," added Kinder Morgan.

Kinder Morgan itself is a shareholder in the Elba Island LNG export plant in Georgia and has a stake in the currently dormant Gulf LNG export project near Pascagoula in the state of Mississippi.

Kinder Morgan added that natural gas transport volumes were down 3 percent overall year-on-year, with notable volume declines on the Colorado Interstate Gas Pipeline (CIG) due to production falls in the Rockies Basin.

However, the company reported increased volumes on the Tennessee Gas Pipeline (TGP), due primarily to weather-related rises in usage across the Texas system and higher deliveries to LNG plants and to customers in Mexico.

There were also higher volumes on the Permian Highway Pipeline going into service and on the Elba Express in Georgia due to increased deliveries to the Elba Island LNG export plant. KMI Chief Executive Steve Kean said the strongest quarterly performance came from its Natural Gas Pipelines division in the face of challenging circumstances presented by the February winter storm in Texas.

"That performance was a result of actions we took following previous weather events," explained Kean.

"Those actions included enhanced weatherization at storage and other facilities, ensuring critical facilities had backup generation so they wouldn't lose power, and deploying additional personnel and equipment at normally automated facilities to maintain operations and be positioned to make any necessary repairs if roads became impassable," he said.

Storage assets

"Our storage assets performed exceptionally well, allowing us to deliver gas into the market throughout the storm. These storage withdrawals, along with gas we purchased before and during the event, enabled us to deliver significant volumes of gas at contractual or prevailing prices," stated the CEO. ■

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Algerian Energy Minister meets in Algiers with Total CEO to discuss LNG and other projects

LNG News Editor

Algeria's Minister of Energy and Mines Mohamed Arkab has held face-to-face talks in Algiers with Total Chairman and Chief Executive Patrick Pouyanné for discussions including future liquefied natural gas projects.

"The two parties discussed future projects to be carried out in liquefied natural gas, renewable energies, energy storage and petrochemicals, in particular the petrochemicals (polypropylene) project which is making steady progress," said a statement.

Partnership

To this end, the two parties reaffirmed their willingness to work to strengthen the partnership between Algerian state energy company Sonatrach and Total, though gave no specific details on LNG projects.

Total CEO Pouyanné with his host Mohamed Arkab in Algiers

Total and Sonatrach signed an agreement in June 2020 to renew their partnership in the LNG export and import sector.

This agreement notably allowed the extension of existing supply contracts for three additional years to provide 2 million tonnes per annum of Algerian LNG to the French market, primarily through the LNG terminal at Fos Cavaou, west of Marseilles.

That agreement also includes the sub-charter of a Total-owned LNG carrier to Sonatrach.

Algerian LNG exports have been recovering from a low ebb and now amount to around 12.40 million tonnes per annum combined from the Arzew and Skikda liquefaction plants on the Mediterranean Coast.

Algeria is also a main pipeline natural gas supplier to Europe and in 2020 exported 14.8 Bcm of gas to Italy, an increase of 12 percent compared with 2019.

The country additionally supplied 9.6 Bcm of pipeline gas to Spain, part of which flowed through to Portugal.

Total's main current energy projects are located in the Tin Fouye-Tabankort (TFT) gas fields, among the largest in Algeria and located in the prolific Illizi-Ghadames Basin, as well as the Timimoun gas fields and oil projects in the Berkine Basin.

Total and Sonatrach are also advancing with their petrochemical project development for Western Algeria.

■

Small emirate in LNG-exporting UAE signs deal with Italian energy company Eni to target gas

Italian energy company Eni has been awarded a licence for Block 7 located in Ras Al Khaimah, the northern-most emirate of seven in the United Arab Emirates, as the Arab nation moves to boost its exploitable natural gas resources in addition to being an LNG exporter.

The Exploration and Production Sharing Agreement was signed between the Chairman of Eni's UAE subsidiary, Fuad Krekshi, and the Chief Executive of the Ras Al Khaimah Petroleum Authority, Nishant Dighe, in the presence of Sheikh Saud bin Saqr Al Qasimi, a member of the Supreme Council of the UAE and Ruler of Ras Al Khaimah.

Block 7 covers an area of 430 square kilometres onshore Ras Al Khaimah.

Eni will act as operator of the Block with a 90 percent participating interest and Ras Al Khaimah's National Oil Company subsidiary RAK Gas would have a stake of 10 percent.

"Block 7 represents an under-explored acreage in a complex thrust belt geological setting, similar to that of the recent discovery of Mahani in the adjacent Sharjah Emirate," explained Eni.

"The newly acquired 3D seismic will allow the joint venture to assess the geological setting of the area and eventually unlock its hydrocarbon potential," said the Milan-based company.

"The presence of the existing gas processing facilities in the Emirate would also allow a rapid development of any discoveries," stated Eni.

Eni is already present in the Emirate of Ras Al Khaimah operating Offshore Block A where, after an initial geological and geophysical study period, preparations for drilling operations have started.

The acquisition of Block 7 represents another step in Eni's positioning in the Middle East and in the UAE.

Abu Dhabi, the largest emirate along with Dubai, is the longest-standing LNG exporter in the Middle East from its Das Island liquefaction plant in the Gulf.

Eni holds the largest exploration acreage among the energy majors present in the UAE with more than 26,000 square km gross, comprising eight exploration blocks onshore and in shallow waters offshore across the Emirates of Abu Dhabi, Ras Al Khaimah and Sharjah.

Eni and Sharjah National Oil Corp. (SNOC), the state company of that emirate, recently started production from the Mahani gas and condensate field, located in Sharjah's onshore Concession Area B.

This was achieved in less than two years from the signing of the oil contract and in less than a year from the declaration of the discovery.

Eni, a shareholder in projects such as the Damietta LNG plant in Egypt set to soon come back on stream and in two Mozambique LNG projects, is also carrying out exploration activities in areas A and C of the emirate, of which Area C is largely under-explored.

The UAE is aiming to increase its natural gas resources by investing more in exploration and production in the next few years.

In the Sharjah gas field, Eni holds a 50 percent stake in the Concession Area B along with partner SNOC with the Sharjah firm acting as operator. Eni acquired Area B in a competitive bid round in January 2019.

■

Indian LNG cargoes turn positive after some falls

India's liquefied natural gas imports edged higher for the first month in four, along with domestic gas production, as a new LNG import facility on the West Coast is being commissioned to boost delivery capability amid the nation's slow economic recovery from the ongoing effects of Covid-19.

LNG deliveries to India for the month of March came to 2.20 million tonnes, or around 32 cargoes, which was just 0.1 percent higher than the 2.19MT received in March 2020.

Imports for the whole 2020-2021 fiscal year amounted 24.31MT, a decline of 3 percent compared with the 25.07MT imported in the previous fiscal year, according to the latest data from the Indian Ministry of Petroleum and Natural Gas.

LNG imports for the month of February 2021 had come to 2.08MT versus 2.60MT in February 2020, a drop of 20.2 percent.

India's calendar-year imports for 2020 had moved above the 25MT mark to 25.29MT.

That was 5.5 percent higher than in 2019 when the shipments amounted to 23.98MT, after rising 7.1 percent from the 22.42MT received in 2018.

The previous Indian monthly year-on-year increase in LNG imports until March 2021 was in November 2020 when 2.14MT was received.

LNG deliveries to India come mainly from Qatar, which provides over one-third of volumes, as well as West Africa, the US, Asian nations, Australia and the spot market.

Ministry data also showed that the costs of importing cargoes of LNG amounted to around $800M for March, or around $25M per cargo, versus $700M in the same month of 2020.

Yantai Port Group aims to complete first of three LNG terminals in 2022

LNG News Editor

Shandong Oil & Gas executives sign Yantai LNG agreement

Yantai Port Group, the Chinese cargo transportation, warehousing and harbour management company in the northeast province of Shandong, is taking part in three liquefied natural gas storage and terminal projects to be completed between 2022 and 2025.

Port executives said government approvals for the ventures were making their way through the regulatory process to be located in Yantai Port, one of China's industrial and petrochemical hubs.

Build-out

The current terminal project under construction involves a partnership with Shandong Poly-GCL Pan-Asia International Energy and the storage tanks are now being built.

The terminal developers are negotiating future LNG supplies and hosted a visit in March 2021 of a Canadian diplomatic delegation to view the progress of the LNG terminal build-out.

Yantai port is initially aiming to construct two sets of tanks of 316,000 cubic metres of storage and receiving capacity of around 6 million tonnes per annum.

Yantai Port and its joint venture firm Yantai LNG also plan to offer contracts for the building of two other facilities, each with 5 MTPA of capacity.

Yantai is regarded by the government in Beijing as a core platform of what it calls the Northeast Asia economic circle.

The port is an important economic development hub for the areas of the Bohai Sea Rim, the Yangtze River Delta and Shandong Province itself.

Investment is also planned for a separate 5 MTPA storage and terminal project backed by China National Petroleum Corp. with a start-up date set for 2023.

Yantai would take a 49 percent stake in that project with CNPC holding the majority share of 51 percent, likely through its Hong Kong-listed affiliate PetroChina.

The plan for the Shandong Oil & Gas and Yantai venture is to build six 200,000 cubic metres LNG storage tanks in two phases.

Japanese LNG imports fall on Asia cargo decline offset by Middle East

Japan's liquefied natural gas imports declined last month after near record shipments in the previous month and with a fall in spot and Asian cargo numbers being offset by rises in Middle East, US and Russian shipments.

The March 2021 shipments amounted to 7.12 million tonnes, or around 104 cargoes, which was a decline of 1.1 percent on March 2020 when they had amounted to 7.20MT, according to the preliminary trade figures from Japan's Ministry of Finance.

Deliveries to Japan in February 2021 had surged to 8.06MT, or 118 cargoes, a total of 21.5 percent higher than in February 2020 when they had amounted to 6.64MT.

Annual shipments of LNG to the Japanese import network of 37 facilities came to 74.46MT in 2020, down 3.7 percent compared with the 77.32MT received in 2019.

LNG imports by the world's largest buyer of the fuel have continued to drop in recent years. The 2019 total of 77.32MT was 6.7 percent lower than the 82.85MT logged in 2018.

Japan's shipments in March 2021 cost 292.20 billion yen ($2.68Bln), a drop of 22.8 percent on the 384.83Bln ($3.53Bln) spent in March 2020 when volumes were also less.

Japan was expected to have higher imports in the early months of 2021 as it re-built its stocks used in the colder weather of winter.

LNG competes mainly with thermal coal for power generation in Japan, while the nation's nuclear power generation was still at a very low level.

Japan's thermal coal imports in March 2021 came to 8.53MT, a fall of 12.8 percent on the shipments received in March 2020.

Nuclear power usage in Japan is still much reduced to less than a handful on line compared with the 50 units operating in 2011.

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NEWS NUDGES

Santos price forecast

Australian LNG operator Santos, whose shareholdings are in the Gladstone facility in Queensland, Darwin LNG in the Northern Territory and Papua New Guinea LNG, forecast higher LNG prices in the second quarter after the Adelaide-based company reported US$964 million in revenues in the first three months of 2021. Santos said production was 2 percent lower than in the December quarter, primarily due to lower domestic gas demand and unplanned maintenance in PNG LNG. Higher GLNG equity production from coal-seam gas fields supported annualised LNG output of 6.4 million tonnes per annum.

Seaspan approval

Seaspan Marine. the ferries-to-tugs shipping and ship services company based in Vancouver, said it secured an Approval in Principle from French classification society, Bureau Veritas, for the design of a liquefied natural gas bunkering vessel with 7.600 cubic metres capacity. The vessel has been designed for ship-to-ship LNG transfers as well as coastal-short sea shipping by Vard Marine Inc., a partner of Seaspan Ferries.

Algeria gas deliveries

Algeria's natural gas exports recorded a marked increase in the first quarter of 2021 after an increase in its production and demand from its customers, according to state energy company Sonatrach. Italy was the leading destination in the first quarter for Algerian gas exports with a total volume of 6.4 billion cubic metres, an increase of 109 percent on 2020. ■

Enagás praises earnings impact of Trans-Adriatic Pipeline stake

LNG News Editor

Azerbaijan gas is now flowing to Greece and rest of EU

Enagás, the Spanish national gas grid operator with Europe's largest LNG import terminal network, posted lower first-quarter net profits, though praised the contribution to earnings of its Trans-Adriatic Pipeline (TAP) investment.

"The Trans-Adriatic Pipeline has started to contribute significantly to the results of the company, after its commissioning at the end of 2020," explained Enagás.

The company's first-quarter net profits came to €92.9 million ($111.5M) compared with €119.1M in the first three months of 2020.

Network

Enagás, which has capacity at five LNG regasification terminals in Spain handling over 200 cargoes a year, said the first-quarter 2021 deliveries by the Trans-Adriatic Pipeline amounted 1.16 billion cubic metres of natural gas to its target markets.

The operational availability for the first quarter was 100 percent on the pipeline, an 878-kilometres transportation system bringing Caspian natural gas from Azerbaijan to Greece, Albania, via the Adriatic Sea and Italy and whose main shareholders are among Europe's main LNG terminal and grid operators.

The pipeline, known as TAP and which took over four years to build, is the European leg of the Southern Gas Corridor, a gateway project that in time will transport 10 Bcm per annum of gas supplies from Azerbaijan to multiple markets in Europe and as an alternative to Russian gas from Gazprom.

TAP's shareholders in addition to Enagás include the gas grid operators of Italy and Belgium, Snam and Fluxys, as well as UK oil and gas major BP, Swiss trading firm Axpo and the Azerbaijani energy company Socar.

Enagás operates most of Spain's LNG terminals, Snam has two terminals in Italy and Fluxys operates the Zeebrugge LNG facility and has a major stake in Dunkirk LNG in France.

These three LNG-focused shareholders in TAP have 55 percent of the equity.

Enagás has four import terminals in Spain at Barcelona in the northeast, Cartagena in the southeast, Huelva in the southwest and Gijon in the northwest. ■

Fluxys completes transaction for minority stake in Brazil gas system

Belgian company Fluxys, whose assets include the Zeebrugge LNG import terminal and a stake in Dunkirk LNG in France as well as the Trans-Adriatic Pipeline, has completed its purchase of minority stake in a gas system operator in Brazil.

The deal is for part of the Brazilian utility, Transportadora Brasileira Gasoduto Bolívia-Brasil (TBG), which is the owner and operator of a 2,600-kilometres pipeline system in the southern part of the South American country linking with neighbour Bolivia.

Fluxys said the completion of the equity transfer was made by its new partner in TBG, the US fund, EIG Global Energy Partners.

"The agreement with EIG is a solid fit with Fluxys' strategy to develop outside Europe," said the Belgium-based company.

"The work done by Fluxys and EIG has provided a sound basis for their continued cooperation," it added.

"Fluxys looks forward to joining the Board of TBG in its efforts to move the company ahead in its development and has set up a branch in Rio de Janeiro for managing its partnership in TBG," Fluxys stated.

The Fluxys infrastructure group employs 1,200 people in Europe in its growing gas transmission and storage and LNG terminal businesses.

Its associated companies across Europe operate 9,000km of pipelines and its assets import 29 billion cubic metres of regasified LNG.

It is also a shareholder in the Trans-Adriatic Pipeline, the 878-kilometres transportation system bringing Caspian natural gas from Azerbaijan to Greece and Albania, and via the Adriatic Sea to Italy.

The Belgian grid operator said the partnership with TBG was an important step in the roll-out of the Fluxys overseas growth strategy. ■

Woodside Acting CEO O'Neill outlines LNG export and project advances on US$1Bln income

LNG News Editor

Woodside Petroleum Acting Chief Executive Meg O'Neill said liquefied natural gas sales revenue in the first quarter of 2021 jumped 22 percent versus the end of 2020 and the Western Australian liquefaction plants operator achieved record spot LNG cargo prices.

The company said in its overall revenues and operational report that total sales income for the first quarter rose to US$1.12 billion, an increase of over 4 percent on the US$1.07Bln posted in the first three months of 2020.

Revenues

For LNG. revenues came to US$838 million versus US$607M in the quarter to the end of December 2020.

"Woodside achieved record spot LNG prices and its highest price premium for an oil cargo during the period. More importantly, the sustained increase in oil and gas prices reflects the rebound in demand as economic conditions improved across Asia," said O'Neill, whose is in the CEO role until a successor is named to retiring Peter Coleman.

"The swift rebalancing of markets after the disruptions of 2020 further underpins our positive outlook for LNG in the medium term," stated O'Neill.

Woodside's North West Shelf plant, Australia's oldest

Woodside's revenue showed average realised spot LNG cargo prices on the Japan-Korea Marker level of US$$11.40 per million British thermal units in the first three months of 2021, compared with US$4.80 per MMBtu in the prior-year quarter and US$5.50 per MMBtu in the fourth quarter of 2020.

Woodside operates the North West Shelf plant in Western Australia as well as the Pluto LNG facility while also having a stake in the Chevron-operated Wheatstone plant.

Woodside's LNG sales from its volumes at each plant in the first quarter were higher than in the same three months of 2021.

They amounted to 651,149 tonnes from its one-sixth NWS share, 1.07 million tonnes from Pluto and 255,480 tonnes from Wheatstone.

Overall average realized LNG prices, including long-term contracts, were higher in the first quarter of 2021 at US$6.90 per MMBtu versus US$4.80 MMBtu in the fourth quarter of 2020, though were lower than the previous year when the three-month average was US$8.10 per MMBtu.

"Production on our oil assets was impacted by heavy weather in the quarter but this was offset by an increase in our average realised price to a level comparable to the first quarter of 2020," explained the Acting CEO.

The Perth-based company reported progress on the Sangomar project for offshore Senegal in West Africa with the cutting of first steel for the Floating Production Storage and Offloading (FPSO) unit topsides and preparations were under way for the forthcoming drilling campaign in mid-2021.

Woodside also ramped up engineering and procurement activities for the Scarborough gas field offshore Western Australia that will provide additional LNG output at the Pluto plant and underpin the Burrup Peninsula gas hub.

"We've also finalised the design concept for modifications to Pluto Train 1 which will enable the processing of up to 3 MTPA of Scarborough gas," explained O'Neill.

"These modifications, combined with the 5 MTPA capacity of Pluto Train 2, would enable full utilisation of the 8 MTPA offshore capacity," she added.

"The gas processing agreements for Pluto and Waitsia gas, which will unlock further value from the North West Shelf Project, are in place and we've committed to supplying significant additional domestic gas volumes to Western Australia from our equity offtake from 2025," stated O'Neill.

Other first-quarter highlights, on the green signalling front, were delivery of its the first carbon offset condensate cargo and the signing of an accord with the Government of Tasmania for the proposed H2TAS renewable hydrogen project.

In LNG sales, Woodside additionally mentioned the signing of the sale and purchase agreement (SPA) with RWE Supply and Trading GmbH, a unit of the German utility, for the supply of around 800,000 tonnes per annum of LNG.

This follows the signing of a previous deal with another German utility, Uniper.

"The SPA signed with RWE in February was another demonstration of customer appetite for new LNG supplies around the middle of this decade, a timeframe which supports the development of our world-class Scarborough gas resource," said O'Neill.

"Like the SPA for additional volumes signed with Uniper earlier in the quarter, the agreement with RWE includes the opportunity for us to explore the potential for carbon-neutral LNG trading," she added. ■

GTT gains approval for update of No. 96 tank

Gaztransport and Technigaz (GTT), the French LNG storage technology company, has developed a new and updated version of its classic No. 96 cargo containment tank.

GTT said the No. 96 Super-plus, an evolution of the No. 96, has received an Approval in Principle (AiP) from the French classification society Bureau Veritas.

"The new No. 96 Super-plus technology integrates insulating Reinforced Polyurethane Foam (R-PUF) panels instead of plywood boxes, used for both the primary and secondary insulation spaces, to reduce the heat ingress inside the tank," explained GTT.

"Glass Wool flat joints are also inserted between adjacent foam panels to optimize the behavior of the system and ensure it the best thermal performance," it added.

The No. 96 Super-plus maintains the main features of the No. 96 technology that have been key factors in its success, in particular the principle of double Invar® metallic membranes and the mechanical anchors fixing the insulating panels to the inner hull.

With this innovation, GTT said its design reduces once again the evaporation of the cargo during operations.

"The No. 96 Super-plus offers a guaranteed Boil Off Rate (BOR) of 0.085% V/d for the current standard size design of LNG carrier of 174.000 cubic metres capacity," added GTT.

"Further reductions down to 0.08% V/d are possible for larger capacities such as 200.000 cubic metres thanks to scale effects," the company noted.

GTT, listed on the Euronext Paris stock exchange, believes that final class society approval from Bureau Veritas should be obtained by mid-2021.

Mitsui OSK Lines changes FSRU order for super-large LNG carrier

LNG News Editor

Mitsui OSK Lines, the Japanese shipping company with an operating fleet of almost 100 liquefied natural gas carriers, has changed an order with a South Korean shipyard because of the cancellation of the LNG import terminal project for the German North Sea port of Wilhelmshaven.

MOL said its order for a floating storage and regasfication unit (FSRU) with South Korean shipbuilder Daewoo Shipbuilding and Marine Engineering (DSME) had been altered to a conventional LNG carrier described as "super large".

The 'MOL FSRU Challenger' is the largest FSRU

Consequence

The Japanese shipping line was forced to act after German utility Uniper called off the Wilhelmshaven import project.

Mol ordered the FSRU from DSME in May 2020 and subsequently signed a charter on the ordered unit with the Wilhelmshaven project. The FSRU had been planned for delivery by the end of June 2023. Wilhelmshaven is Germany's only deep-sea port in the North Sea and would have been capable of offloading the largest LNG carriers.

The FSRU for the German port was to have had capacity of 263,000 cubic metres capacity with a unique design tailored to large-scale imports. MOL already has an LNG vessel of similar size, the "MOL FSRU Challenger".

Uniper, based in Düsseldorf, said at the end of 2020 that it was unlikely to pursue the LNG venture because of several factors, including the reluctance of market players to make binding bookings for import capacities.

Uniper has since then switched its focus to other fuels and under the name "Green Wilhelmshaven", Uniper is working on a feasibility study for the development of a German hydrogen hub.

Wilhelmshaven was one of two LNG import terminals being planned by Germany at the start of 2020. The second is an onshore facility at Brunsbüttel, a port on the Elbe River, south of Hamburg.

However, with the demise of the Uniper-led Wilhelmshaven LNG project another German import development has come to the fore at the port of Stade, also on the Elbe.

Norway's Flex LNG concludes Cheniere Energy charter deals

Flex LNG, the Norwegian shipowner with a fleet of 12 modern vessels, has signed charters with Cheniere Energy of the US, for at least four of its carriers, and with all but one of its six current term charters set to expire in 2021-2022.

The new charters, pending any further agreements, are not set to significantly change the proportions of Flex's fleet that operates on the spot and term charter markets, with the owner previously keeping a large section of its fleet onto the spot market.

"We are very pleased to enter into these agreements with Cheniere. They secure attractive employment for four, possibly five, of our ships with a first-class charterer," said Øystein M. Kalleklev, Chief Executive of Flex LNG Management.

"Our large and energy efficient ships are particularly well suited for their long-haul trade and align with Cheniere's efforts to secure required shipping capacity while improving the environmental performance of their overall fleet," added Kalleklev.

" Hence, this agreement makes very much sense for both parties, so we look forward to further developing our relationship in the years to come," he explained.

"Lastly, these contracts add substantial revenue backlog to our company which is in line with our communicated strategy of securing attractive term-employment for our ships when we think the time is right," stated the CEO.

Flex is scheduled to publish its first-quarter results on the 28th of May 2021.

All existing Flex LNG ships are large LNG carriers with a cargo capacity of approximately 173,400 to 174,000 cubic metre s and fitted with efficient dual-fuel two-stroke propulsion.

Flex LNG has signed the charter agreements with US operator Cheniere, which will receive two carriers from the owner in the third quarter of 2021 and another in the third quarter of 2022, with an option to take a fourth in the third quarter of 2022.

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Gazprom advances with Amur gas process plant project linked to 'Power of Siberia' and LNG fuel

LNG News Editor

Gazprom said the Svobodny thermal power plant has started up to serve the Amur Gas Processing Plant, one of the world's largest and part of the "Power of Siberia" project comprising pipeline gas for China and LNG for trucks transporting liquid helium as a new Russian Far East export.

The power plant will supply process steam and electricity to the Amur Gas Processing Plant, currently under construction.

Commissioning

The commissioning ceremony for the Svobodny TPP was held on April 20 in the town of Svobodny in the Amur Region.

In the course of the event, supplies of process steam to the Amur Gas Processing Plant started for the purposes of commissioning.

The Amur GPP will become one of the world's largest facilities in terms of gas processing with 42 billion cubic metres per annum of capacity with a staggered start-up of processing trains from 2021 through 2023.

Amur Gas Processing Plant construction in Russian Far East

The Amur GPP will process multi-component natural gas received via the "Power of Siberia" gas pipeline from the Yakutia and Irkutsk gas production centres.

"Valuable components extracted in the course of processing will be used as feedstock for the petrochemical and other industries," explained Gazprom.

The GPP will include the world's largest helium production facilities with an annual capacity of up to 60 million cubic metres.

The plant will have six production trains. While the first two lines will start in 2021, the other four would be consecutively put in operation before the end of 2024.

In addition to natural gas and helium, the Amur GPP's commercial products will include ethane, propane, butane, and pentane-hexane fraction.

The pipeline gas supplies for China started in December 2019 via Gazprom's "Power of Siberia" trunkline from the Chayandinskoye gas field.

Volumes

During 2020 the "Power of Siberia" supplies to China came to just 3.84 Bcm via the trunkline, which was less than the expected 5 Bcm in the first year.

Gazprom and China National Petroleum Corp. have signed a 30-year supply agreement for Russian gas to be supplied via the eastern route amounting to 38 Bcm per annum once incremental increases had been met over a period of five years. Gazprom said a central link in the export system for commercial helium, one of the components extracted at Amur, will be a Logistics Centre for servicing thermally-insulated containers.

The Centre is being set up near the city of Vladivostok and will be the world's largest hub for delivering liquid helium to the global market.

The trucks delivering the helium containers to the export terminal will be powered by LNG from a small-scale fuel plant.

LNG tanks

The truck are Russian-built with two cryogenic fuel tanks for 530 litres of LNG each, which is a sufficient amount of fuel for the vehicle to cover a distance of up to 1,400 kilometres without refuelling.

About 20 LNG trucks are being delivered by mid-June 2021. They were manufactured in line with the requirements of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

ExxonMobil proposes future carbon-capture project for refiners near Gulf Coast LNG hub

ExxonMobil Corp. has proposed a huge public-private carbon storage project at the centre of the Gulf Coast LNG industry that would collect carbon-dioxide emissions from petrochemical plants and refineries in the area and bury them under the Gulf of Mexico.

Joe Blommaert, President of ExxonMobil's Low Carbon Solutions business, outlined the proposal from the largest US oil producer and major global LNG player.

The ExxonMobil project would target about 50 industrial plants, mostly refineries and petrochemical facilities along the Gulf Coast, where four LNG exports plants operate and others are under construction, including ExxonMobil's joint venture with Qatar Petroleum, the Golden Pass project.

ExxonMobil said its plan would require around $100 billion or more from companies and government agencies to store 50 million metric tons of CO2 by 2030, with capacity potentially doubling by 2040.

The project would be centred on the area of Houston which has a large concentration of oil and gas industry facilities from refineries to petrochemical plants.

"We could create an economy of scale where we can reduce the cost of the carbon-dioxide mitigation, create jobs and reduce the emissions," explained the ExxonMobil executive.

ExxonMobil's carbon storage project is proposed for the Houston Ship Channel, a 50-mile (80-km) long waterway that is part of the Port of Houston and has dozens of refineries and chemical plants along its banks.

ExxonMobil acknowledges that the proposal would require support from other companies and from federal, state and local government agencies.

Carbon-capture and storage is not the preferred option of the left-wing activists running campaigns against US energy companies as they prefer shutdowns and project cancellations.

However, ExxonMobil has long been a leader in carbon-capture and storage and has pledged to increase spending on low-carbon projects to lower emissions at a realistic pace and not by shutting down plants and throwing people out of work.

ExxonMobil, based in Irving, Texas, is contacting potential partners for the project among its refining and chemical plant rivals along the Gulf Coast.

The company has described investors, banks and government officials as being receptive to the CCS plan for the GoM.


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