LNG Unlimited

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French major Total to change name to reflect LNG and green energy focus

CEO Pouyanné says that to anchor transformation AGM in May will vote for new name - Total Energies

LNG News Editor

Energy growth to be based on LNG, renewables and electricity divisions through to 2030 and beyond

French energy major Total reported overall liquefied natural gas sales in 2020 of 38.3 million tonnes, an increase of 12 percent over the previous year, boosted by projects such as the US Cameron LNG export plant in Louisiana and revealed plans to change its name to Total Energies.

"LNG sales increased thanks to the start-up of three Trains at Cameron LNG in the US, the ramp-up of Yamal LNG in Russia and Ichthys LNG in Australia and the increase in trading activities," said Total.

Performance

Adjusted net income plunged 59 percent in the fourth quarter to $1.30 billion versus the same three months of 2019.

Annual adjusted net income dropped 66 percent to $4.06Bln in 2020 compared with the previous year.

Total's cash flow during 2020 also took a hit and fell by 37 percent year-on-year to $17.60Bln.

Fourth-quarter LNG sales volumes to the end of December 2020 dropped 6 percent to 10.0MT from 10.6MT in the same three months of 2019.

Total's natural gas and LNG activities are within the Integrated Gas, Renewables & Power (IGRP) division.

In LNG trading, Total said its average Japan-Korea Marker price for LNG cargoes in 2020 was down 20 percent to $4.40 per MMBtu compared with $5.50 per MMBtu in 2019.

However, the spot price increased to $8.00 per MMBtu in the fourth quarter versus $3.60 per MMBtu in the third quarter.

"The average LNG sales price rebounded by 37 percent in the quarter compared to the previous quarter, due to the seasonality of demand and the delayed impact of higher oil prices in the third quarter 2020 on long-term LNG contracts," the company explained.

Total's realised European natural gas prices declined 31 percent during 2020 to the equivalent of $3.30 per MMBtu.

Hydrocarbon production for LNG in the fourth quarter decreased by 15 percent compared to a year ago, notably due to the shutdown of the Equinor-operated Snohvit LNG plant in Norway following a fire at the end of September 2020.

The company listed several fourth-quarter LNG highlights in its earnings statement, including finalizing its 16.6 percent stake in the Costa Azul LNG project on the Pacific Coast of Mexico, a joint venture led by Cameron LNG plant owner, Sempra Energy.

Total additionally delivered its first "carbon neutral" LNG cargo to the Chinese major, China National Offshore Oil Corp., and completed the first LNG bunkering for a new containership owned by French shipping line CMA CGM.

The LNG fuel operation took place in the Dutch port of Rotterdam.

The Group continued to implement its strategy to integrate along the electricity and gas chain in Europe and has increased the number of its electricity and gas customers by 1.5 million and 1 million, respectively, notably thanks to the finalization of the acquisition in the fourth quarter of a portfolio of customers from Energías de Portugal in Spain.

"The Group's fourth-quarter results rebounded from the previous quarter in a context where oil prices stabilized above $40 per barrel, thanks to strong OPEC+ discipline, and where gas prices rose sharply in Europe and Asia, but where refining margins remained depressed, still affected by low demand and high inventories," said Chairman and Chief Executive Patrick Pouyanné.

Looking ahead, the CEO said the Group's profile will be transformed over the 2020-2030 decade and the growth of energy production will be based on two pillars, LNG and Renewables & Electricity, while oil products are expecting to fall from 55 percent to 30 percent of sales. ■

UNLIMITED AGENDA

Sonatrach commissions Algeria's Hassi R'mel gas hub as supplies to Spain and Italy increase

LNG News Editor

Algerian state energy company Sonatrach, one of the main suppliers of LNG and pipeline natural gas to Europe, has commissioned the Boosting III project for the Hassi R'mel gas hub in Laghouat province of central Algeria, which produces and supplies over half of the nation's natural gas.

The Hassi R'Mel's Boosting III project came into operation as Sonatrach also announced increased natural gas sales in 2020 to both Spain and Italy, its main European markets.

Renewal

The giant Hassi R'Mel field had been in long-term decline but the $2-billion project just completed in a contract led by JGC Corp. of Japan and including local companies, Cosider, GTP and Enac will boost volumes during 2021 and beyond.

The project will increase and stabilize feed-gas supplies to the Mediterranean Coast from the Hassi R'Mel hub to the port of Arzew where one of the nation's two LNG exports plants are located. Algerian LNG exports had been falling in previous years, though in the most recent official annual figures had recovered to a combined 12.34 million tonnes from the Arzew plant and the second facility at Skikda.

Developing fields in Algeria and linking them is priority

Developing new fields in Algeria and linking them to the rest of the gas network via the Hassi R'Mel hub has been a strategic priority for Sonatrach over the past few years.

The Hassi R'Mel's Boosting III project entailed the installation of three compressor stations: South, Center and North.

"Despite the Covid-19 pandemic, the contractual deadlines for completion and start-up of the operating phase were met with the required quality, thanks to the commitment of the project team," said Sonatrach.

The Booster III project will enable the maintenance of an estimated production level of 180 million cubic metres per day and to recover additional reserves estimated at 400 billion cubic metres of natural gas.

Sonatrach also stated that in 2020, Algeria exported to Italy a volume of gas of 14.8 Bcm, an increase of 12 percent compared with 2019.

The Algerian supplier also consolidated its position as Spain's leading gas supplier in 2020 with an exported volume of 9.6 Bcm, part of which flowed through to Portugal.

The volumes also comprised LNG cargoes delivered to the southern European nations as well as on the three pipelines, two to Spain and one to Italy. ■

EWC allowed to get Indonesian LNG project back on track after zoning mistake is reversed

Energy World Corp., the Australian-listed power project developer in southeast Asia, has managed to get its liquefied natural gas and power venture on the South Sulawesi coast of eastern Indonesia back on track after a ruling from regulators.

EWC's Indonesian project, called South Sulawesi LNG (SSLNG), involves a 315 megawatts gas-fired power plant at Sengkang and an affiliated LNG production plant with output of 2 million tonnes per annum.

"The Directors of EWC are pleased to announce the Planology Department of Ministry of Forestry have formally completed the review of the historical land documentation and the remapping of the land area which was incorrectly claimed to be forestry land in June 2017," the company explained in a filing to the Australian Securities Exchange.

"PT SSLNG have now been advised that the land upon which we have constructed the mid-scale modular LNG facility has been reconfirmed by all the relevant authorities as industrial land and after a four-year delay," added EWC.

"We have now been encouraged to recommence our project construction and the related commercial discussions associated with the project financing and the offtake of LNG from the plant," said the statement from Brian Allen, Executive Director of EWC.

Allen stated that the ruling shows the company properly purchased industrial land and built the plant on industrial land.

"This is consistent with the documentation we possess and the permitting we originally received to allow the commencement of the plant construction until, we were advised, wrongly, that the plant was being built on forestry land and to halt all site activity and construction," said Allen.

EWC had previously been granted a 20-year extension to its Indonesian natural gas production-sharing contract.

EWC has its Australian headquarters at Seaforth, a suburb of Sydney in New South Wales.

The company reiterated that the LNG facility was substantially complete and has been funded at project level with equity from EWC.

A total of US$343 million has been invested in the project to date (excluding finance and soft cost).

"We are confident that we will finance this with project debt. With the first 500,000 tonnes per annum, we expect the project to expand rapidly to 2 MTPA capacity using funds generated from LNG sales," he added.

EWC said that now that the land has been re-certified, all efforts will be applied to completing the project as expeditiously as possible.

While some aspects of the project were still subject to some negotiation with third parties, EWC expects that first LNG sales could take place in about 18-24 months.

"EWC would like to take this opportunity to express their appreciation and thanks to the various Indonesian Government departments and officials in Wajo and Makassar in South Sulawesi and in Jakarta for their due diligence procedures on this development and for their guidance and support throughout this whole remapping process," said EWC. ■

Japanese spot LNG prices soar high levels

Japanese spot LNG prices soared for contracted and delivered cargoes in January to as high as $18.50 per million British thermal units, back to the levels they were in 2014 that prompted the Japanese government to start publishing prices.

The Asian spot market continued its recovery with the January 2021 contracted shipments rising to more than double the $7.40 per MMBtu logged in December 2020 and triple the $5.90 per MMBtu reported in January 2020.

January 2021 delivered spot cargo prices also rose to $15.15 per MMBtu compared with $6.80 per MMBtu in December 2020 and $6.00 per MMBtu in January 2020, according to the data from the Japanese Ministry of Economy, Trade and Industry (METI).

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. These prices have been published by Japan since 2014 to bring more transparency to the market.

However, most Japanese LNG cargoes are still delivered on a long-term contract basis linked to crude oil and this price has increased rapidly in the past week. It is currently at around $9.00 per MMBtu based on a North Sea Brent crude price of $61 per barrel.

Oil prices have risen and the dollar exchange rate against other major currencies has weakened. While there are continued global economic concerns, there was optimism of more oil demand in the months ahead coupled with agreed production cuts by Saudi Arabia to support prices.

Japan's Inpex takes Prelude hit while forecasting energy recovery

LNG News Editor

Shell-operated floating LNG hull had troubled time in 2020. The Japanese company is a stakeholder.

Inpex Corp. of Japan, operator of the Ichthys plant in Northern Australia and a shareholder in the offshore Prelude FLNG plant with Royal Dutch Shell, reported losses for 2020 and took hits on Prelude and Eagle Ford assets in the US, while forecasting a recovery in the Japanese and global oil and gas markets for the rest of 2021.

Inpex reported a net loss of 111.7 billion yen ($1.06 billion) for 2020 compared with a net profit of 167.3Bln yen ($1.60Bln) in the previous year.

Stakes

Inpex is a shareholder with France's Total in the Ichthys plant near Darwin, supplying Japanese utilities with LNG cargoes as well as Taiwan.

The Ichthys plant came on stream in 2018 and produces almost 9 million tonnes per annum of LNG from two processing Trains.

It additionally owns a 17.5 percent interest in the Shell-operated Prelude FLNG facility, moored 475 kilometres offshore of Broome and which was hit by production problems for most of 2020.

Inpex said it took an impairment loss in its 2020 earnings on assets related to Prelude FLNG of 129Bln yen ($1.23Bln) for the year to the end of December.

The Japanese company also took a hit of 33.23 billion yen ($317M) on its tight oil project in the US Eagle Ford shale basin.

"The global economy experienced a slowdown in economic activity in countries around the world impacted by the spread of Covid-19, and business conditions rapidly deteriorated," said the company.

"The Japanese economy also experienced a rapid contraction in corporate earnings and consumer spending as well as a deterioration in employment following the declaration of a state of emergency (for Covid) in April 2020," it added.

"At present exports, production and consumption are showing signs of recovery thanks to a phased increase in socioeconomic activity," stated Inpex.

While some uncertainty remains, Inpex is expecting a turnaround in its own financial performance during 2021 as the Japanese and global economies recover.

Air Products reports quarterly sales of $2.4Bln as order levels stable

Air Products, the leading provider of LNG equipment and processing and industrial gases, reported a fiscal quarterly increase of 5 percent in sales to $2.4 billion, though net income remained flat over the three months as orders included one for Mexico's first LNG export project.

Earnings per share declined by 1 percent to $2.12 per share, despite an estimated $0.10 to $0.15 negative impact from Covid-19.

Net income of $487 million, including $10M from discontinued operations, was flat compared with $488.9M in the prior-year period.

The LeHigh Valley, Pennsylvania-based company highlighted its continued safe operations at more than 750 facilities around the world, reliably supplying customers and executing world-scale projects despite the continued challenges of the pandemic.

The quarter to the end of December, which was the first in the fiscal year of Air Products, was also marked by an order to provide proprietary LNG technology, equipment and related process license and advisory services to Sempra Energy's Costa Azul LNG export terminal project in Mexico.

The quarterly sales rise was achieved on 3 percent favourable currency, 2 percent higher pricing and 1 percent higher energy pass-through.

Earlier in 2020 Air Products was selected to supply the LNG process technology and equipment for Mozambique's first onshore LNG production plant in the nation's northeast Cabo Delgado province.

It was also chosen by Qatargas for the massive LNG production expansion project at Ras Laffan.

Air Products said that sales volumes declined 1 percent, as new plants, acquisitions and increased sale-of-equipment activities were offset by lower industrial gases demand because of Covid-19 and a reduced contribution from the Lu'An synthesis gas joint venture project in Changzhi City in China's Shanxi Province.


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NEWS NUDGES

Höegh LNG charters

Höegh LNG reached an agreement with global commodities firm Trafigura for an extension of the existing interim LNG carrier time charter for the "Höegh Gannet" vessel by 12 months and entered into a new interim time charter for the "Höegh Gallant" for 12 months from the redelivery from its current charter at the end of March 2021. The Norwegian company had a further charter to report in an agreement reached with Cheniere Energy of the US to extend the existing interim charter for the "Höegh Galleon".

JGC contract from Kazakhs

JGC Corp. of Japan, the leading LNG project engineer, said it was awarded the front-end engineering and design contract for a Gas Separation Plant in the Central Asian republic of Kazakhstan. KazMunayGas, Kazakhstan's state-owned energy company, is part of the project to construct a gas separation plant with a capacity of 957 million standard cubic feet per day adjacent to a plant that is run by the Tengiz Oilfield company,

Bunkering charter

Titan LNG, a Dutch-based LNG supplier, has agreed with Japanese shipping company NYK Line to charter the LNG bunkering vessel, "Green Zeebrugge". The ship, previously known as the "Engie Zeebrugge", was renamed by NYK after it became the sole owner. The charter agreement gives Titan LNG use of the "Green Zeebrugge" for "several years". The vessel, with capacity of 5,200 cubic metres, will be used to supply fuel to larger LNG-powered vessels in the Amsterdam-Rotterdam-Antwerp (ARA) region ■

Qatar signs contracts to move back to forefront of LNG nations with plan for $29Bln North Field East expansion

LNG News Editor

CEO Al-Kaabi signs contracts with Chiyoda and Technip Energies to move forward with the NFE build-out

Qatar Petroleum has taken the final investment decision and signed project engineering contracts with Japanese company Chiyoda Corp. and European-based Technip Energies for a major liquefied natural gas expansion backed by add-ons such as carbon-capture and solar power.

The expansion will comprise the construction of four Trains for liquefaction to take the Arab Gulf state's output from 77 million tonnes per annum up to 110 MTPA.

Further boosts

Qatar is additionally considering boosting capacity beyond the 126 MTPA future second expansion already announced.

The contract covering onshore engineering, procurement and construction was signed with the Chiyoda-Technip joint venture and is known as the North Field East project.

The main scope of the EPC contract is the construction of the four Trains, each with a capacity of up to 8.25 MTPA with associated facilities for gas treatment, natural gas liquids recovery, as well as helium extraction and refining within the Ras Laffan complex.

"Production from that phase will start by the fourth quarter of 2025 and reach full capacity by late 2026 or early 2027," said Saad Sherida Al-Kaabi, Qatar Petroleum Chief Executive as well as Qatar's Minister of State for Energy.

"The total cost of the project will be $28.7 billion, making it one of the industry's largest investments in the past few years and the largest LNG capacity ever built," added Al-Kaabi.

Al-Kaabi explained that although Qatar Petroleum was ready to develop the additional North Field resources for the overall project on its own, a bidding process for international oil and gas companies to take up to a 30 percent stake in the first phase was being launched.

Al-Kaabi said he expected a decision on finalizing any partnerships for the expansion with oil and gas majors to be announced by the end of 2021.

Current partners of Qatar in the existing Trains at Ras Laffan include ExxonMobil, ConocoPhillips, Royal Dutch Shell and France's Total.

A second expansion phase, known as the North Field South project, would lift Qatar's LNG production capacity to 126 MTPA by 2027 from the current 77 MTPA.

Al-Kaabi said that the Qataris were also evaluating possible further increase in LNG capacity beyond the 126 MTPA.

The decision to proceed with the investment was announced during a Webcast signing ceremony to celebrate the execution of the EPC contract.

The contract was signed by Al-Kaabi, along with the Chairman and CEO of Chiyoda, Kazushi Okawa, and Arnaud Pieton, the President of Technip Energies.

"This project will generate substantial revenues for the state of Qatar and will have significant benefits to all sectors of the Qatari economy during the construction phase and beyond," added Al-Kaabi.

The Qatari CEO said the EPC signing had particular importance as it came at a critical time when the world is still reeling from the effects of a global pandemic and related depressed economies.

"This investment decision is a clear demonstration of the steadfast commitment by the State of Qatar to supply the world with the clean energy it needs," he added.

Al-Kaabi noted that the expansion would include its own carbon-dioxide capture and sequestration (CCS) system that would be integrated with a wider CCS project in Ras Laffan, which would be the largest of its kind in terms of capacity in the LNG industry.

A significant portion of the expansion project's electrical power needs would be provided from Qatar's national power grid, and Qatar Petroleum is in the process of procuring such power from the 800 megawatt solar power plant currently under construction in Al-Kharsaah.

This is in addition to a further 800 MW of solar power which Qatar Petroleum will construct in the near future as part of its plans to have a solar power portfolio of more than 4,000 MW by 2030.

The North Field East project would also include a jetty boil-off gas recovery system, which will help reduce GHG by a further 1 MTPA of CO_2 equivalent.

Al-Kaabi concluded his remarks by thanking the Emir of Qatar for his continued support of the nation's growing LNG industry. ■

Equinor sells US Bakken shale assets and reports LNG negatives for Tanzania and Hammerfest

LNG News Editor

Equinor of Norway, the largest natural gas producer in Western European fields, said it was selling its assets in the oil-rich Bakken shale formation in the US states of North Dakota and Montana as it reported quarterly and annual losses and wrote-down assets by almost $1 billion on the Tanzania LNG project.

Equinor said it was selling its Bakken assets to US company Grayson Mill Energy, backed by EnCap Investments, for a total amounting to about $900 million.

Sale agreed with Grayson Mill Energy for Plains resources

Acreage

The transaction covers all of Equinor's operated and non-operated acreage, totalling 242,000 net acres, and associated midstream assets in the Bakken.

Equinor said it was optimising its oil and gas portfolio to strengthen profitability and make it more robust for the future.

"Over the past few years, we have improved the safety, cost efficiency and carbon-dioxide intensity of the Bakken assets significantly and I am confident Grayson Mill Energy will continue on this path," said Anders Opedal, President and Chief Executive of Equinor.

Equinor had sold its US Eagle Ford onshore natural gas assets in the fourth quarter of 2019 to Spain's Repsol in a $325M deal.

Equinor still holds other unconventional oil and gas operated and non-operated positions in the Appalachian Basins of Ohio and Pennsylvania and retains a portfolio of offshore assets in the US Gulf of Mexico.

In its earnings statement, Equinor reported a fourth-quarter loss of $2.41Bln compared with a loss of $231M in the prior-year quarter, following net impairments of $1.30Bln and a write-down of $980m related to the Tanzania LNG project.

Equinor's annual losses came to $5.94Bln for 2020 versus a profit of $1.85Bln in 2019.

However, adjusted earnings after tax resulted in a fourth-quarter loss of $554M and an annual adjusted profit of $924M.

"Our results are impacted by the market turmoil during the year, but with strong cost improvements and capital discipline we delivered positive net cash flow for the quarter and the full year," said CEO Opedal.

In an overview of natural gas operations, Equinor reported output of 2,043 mboe per day in the fourth quarter of 2020, down 7 percent compared with 2,198 mboe per day in the fourth quarter of 2019.

This was mainly due to expected natural decline, turnarounds for several fields, especially on the Norwegian Continental Shelf (NCS), and the shutdown until later in 2021 of the Hammerfest LNG plant after a fire in September 2020.

A gas production halt in Brazil and the previous divestment of Eagle Ford shale gas assets contributed to the decrease.

"New fields on the NCS, higher flexible gas off-take and new wells in the US onshore partially offset the decrease," said Equinor.

Net operating income was negative $989M in the fourth quarter compared to a positive $1.51Bln in the fourth quarter of 2019.

"During 2020 we have delivered more than $3.7Bln in savings, well above our ambition for the action plan we launched in March to strengthen financial resilience," said CEO Opedal.

"We are increasing production volumes from Johan Sverdrup (NCS) even further, and we used our flexibility to have high gas production as gas prices increased in the quarter. In addition, we have started production from Snorre Expansion ahead of time and well below cost estimates," explained Opedal.

MOL holds naming event for carrier set for GAIL

Mitsui OSK Lines, The Japanese shipping company with an operating fleet of almost 100 liquefied natural gas carriers, has held a virtual naming ceremony for the latest newbuild to be chartered to Gas Authority of India (GAIL), the leading LNG importer.

The "GAIL Bhuwan", was named by Anu Jain, wide of Manoj Jain, Chairman and Managing Director of GAIL.

The vessel with 180,000 cubic metres capacity was constructed at Daewoo Shipbuilding and Marine Engineering in South Korea and will be managed by MOL LNG Transport (Asia) Ltd.

The vessel, which has membrane storage tanks has a width of 47.9 metres, a length of 297.9 metres and a draft of 11.50 metres.

The shipping line pointed out that GAIL has contracts for procuring LNG volumes from the US under long-term Sales and Purchase Agreements and a tolling arrangement with the Cove Point plant in Maryland.

"The vessel will ship clean LNG fuel from the US to India, for meeting the country's energy requirement and also to other markets globally," said MOL.

GAIL current LNG portfolio amounts to 14 million tonnes per annum from various long-term and short-term contracts.

MOL has been participating in the Indian market since the beginning of LNG import into the country, with the distinction of having brought the first gas from Qatar.

GAIL is the largest natural gas company in India with around 12,426 kilometres existing cross-country pipelines and another 6,747km pipelines in advance stage of completion.

Peninsula Petroleum joins with Petronas and H-Line for fuelling

LNG News Editor

Peninsula Petroleum, a leading marine fuels company, teamed up with Petronas Marine of Malaysia to complete its first LNG bunker supply to H-Line Shipping of South Korea in Malaysian waters.

Peninsula said this operation had special relevance as it represented the first LNG bunker delivery to the world's largest LNG-powered bulk carrier, the 180,000 deadweight-ton eco-friendly vessel "HL Green" on its maiden voyage.

The 180,000 DWT eco-friendly "HL Green" on maiden voyage

Brokers

"The company's global network of offices, suppliers and customers facilitates operational excellence, ensuring smooth supply and quality service," said Peninsula.

Additionally, Peninsula's LNG fuel-brokering is being expanded by acquiring its own LNG bunkering vessels and the firm was currently in discussions with several shipowners and shipyards.

"The trust placed in the company by a longstanding customer allowed Peninsula to co-ordinate with potential suppliers and expedite the deal from start to finish," added the company.

John A. Bassadone, Peninsula's Chief Executive, thanked the partners for a job well done in providing fuel for the "HL Green".

"The Peninsula approach to traditional marine energy works equally efficiently with more sustainable fuels, without any compromise on product quality, or service, so expect to see more activity in this space," added Bassadone.

"We are also delighted that the sustainability principles of Peninsula fully align with Petronas Marine, H-Line and their charterer, POSCO," added Bassadone.

The CEO stated that it was pleasing to be part of a drive towards positive environmental change, alongside highly respected companies.

"Delivery took place safely and was completed within 20 hours, a record time for the quantity supplied (2,760 cbm), including the cooling down of an LNG tank," explained Nacho De Miguel, who leads Peninsula's LNG business.

Norwegian firm wins contract from Germany for LNG systems

Høglund Marine, the Norwegian company specializing in both retrofit and newbuild projects, has signed a contract to supply an advanced LNG Fuel Gas Supply System for three German ships owned by the German Federal Government to be deployed in hazardous roles.

The customised Fuel Gas Supply Systems (FGSS) have been developed to allow the LNG-fuelled vessels to take on hazardous roles such as pollution control, emergency towing and firefighting.

Høglund, based in Tønsberg in southeast Norway, signed the agreements with the Abeking and Rasmussen (A&R) shipyard for three multipurpose vessels ordered by the German government's Federal Waterways and Shipping Administration.

The design and construction of the three vessels is being supervised by the Federal Waterways Engineering and Research Institute.

To meet the advanced specifications for the LNG system that ensures safe operation in hazardous atmospheres, Høglund will be collaborating with HB Hunte Engineering, headquartered in Oldenburg in the northern German state of Lower Saxony.

"This project makes A&R the only shipyard worldwide offering LNG-fuelled vessels that are qualified to operate in hazardous atmospheres," said Høglund.

These 90-metre-plus vessels will be equipped with engines generating up to 12,000kW and 145 tonnes of bollard pull, and will have a top speed greater than 15 knots.

The three vessels will also be exclusively LNG-powered. Although suitable for worldwide operation, they will be deployed within the German coastline where they will carry out works on sea marks, pollution control and utilising hydroacoustic equipment as well as in pollution control, emergency towing and firefighting.

Høglund explained that given the intended versatility and multiple roles of the vessels and the hazardous atmospheres they will operate in there are obvious additional safety requirements.

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Sempra gives more details of Hackberry project with salt-dome backing for feed-gas security

LNG News Editor

Sempra Energy's storage unit has given more details of plans to construct and operate a "high-deliverability" salt-dome natural gas storage facility in Louisiana for existing and proposed LNG export plants with interconnections to key pipelines.

The applicant-prepared environmental assessment for the Hackberry Storage Project submitted to the Federal Energy Regulatory Commission gives full details of the storage facilities in Cameron Parish capable of providing 20.03 billion cubic feet of working gas capacity and 1.5 Bcf per day of LNG feed gas.

LA Storage is leading the project and was described as a wholly-owned subsidiary of Liberty Gas Storage, ultimately held by Sempra LNG, operator of the Cameron LNG export plant, and parent Sempra Energy.

The storage facility would interconnect with infrastructure operated by Cameron Interstate Pipeline and the certificated Port Arthur Pipeline Louisiana Connector to be operated by Port Arthur Pipeline in Cameron and Calcasieu Parishes in Louisiana.

The caverns are surrounded by marshes and various waterways located in the area of Cameron Parish

Access

"The interconnection of the Hackberry Storage Project with these pipelines would in turn provide customer access among interstate pipelines serving the Gulf Coast market and natural gas markets along the Southeast and East Coasts," LNG Storage told the regulators.

LA Storage proposes to construct a new natural gas storage facility by converting three existing salt-dome caverns to natural gas storage service and developing one new salt-dome cavern for additional natural gas storage service.

"These facilities would be located within the proposed 89.5-acre natural gas storage facility (Gas Storage Facility), which is part of a 160-acre tract of land owned by LA Storage in Cameron Parish," said the filing.

"A portion of the Gas Storage Facility site was previously cleared for oil and gas operations," it noted.

"As a result, the 89.5-acre parcel currently is mostly open area and contains the three existing caverns and an existing well pad," said LA Storage.

Additionally, the project would include the construction of other facilities such as the Pelican Compressor Station, a 21,400-horsepower facility with four natural gas driven reciprocating compressors.

Advantages

"The Hackberry Storage Project would provide high-deliverability storage services that the natural gas markets require to address increasing demand, increased domestic production, increasing LNG exports and heightened gas price volatility," explained the report. ■

US natural gas outlook forecasts higher 2021 prices because of LNG exports and lower output

The US Government expects LNG exports will average 8.5 billion cubic feet per day for all of 2021compared with 9.8 Bcf per day during January when around 18 to 22 cargoes were lifted each week from the six plants in operation amid high spot prices in North Asia.

The forecast came from the short-term outlook of the Energy Information Administration, which also expects higher natural gas prices in 2021 and a decline in natural gas production and gas use for power generation.

"Foggy conditions and high winds affected export operations in January at Sabine Pass LNG, Corpus Christi LNG, and Cameron LNG, leading to several weather-related closures and sporadic suspension of piloting services on several days," noted the report.

The three other export plant are Freeport in Texas, Cove Point in Maryland and Elba Island in Georgia.

"In 2022, EIA forecasts LNG exports will average 9.2 Bcf per day, surpassing the amount of natural gas exported via pipeline for the first time," it stated.

The EIA expects that Henry Hub spot prices will average $2.95 per MMBtu in 2021, which is up from the 2020 average of $2.03 per MMBtu.

EIA expects that continued growth in LNG exports and in domestic natural gas consumption outside of the electric power sector, as production remains relatively flat, will contribute to Henry Hub spot prices rising to an average of $3.27 per MMBtu in 2022.

In US production of dry natural gas, the EIA said the average would amount to 90.5 Bcf /d in 2021 and 91.0 Bcf/d in 2022, which are down from an average of 91.3 Bcf/d in 2020 and 93.1 Bcf/d in 2019.

In the forecast, dry natural gas production remains relatively flat, averaging between 89.8 Bcf/d and 91.0 Bcf/d in every month from February 2021 through July 2022.

"Flat natural gas production is the result of falling production in several of the smaller natural gas producing regions being offset by growth in other regions, most notably in the Appalachia and Haynesville regions," explained the EIA.

US consumption of natural gas is seen averaging 81.7 Bcf/d in 2021, down 1.9 percent from 2020. The EIA expects total natural gas consumption will also fall to an average of 81.0 Bcf/d in 2022.

"The decline in total US consumption reflects less natural gas consumed for electric power as a result of higher natural gas prices compared with last year," stated the report.

Henry Hub spot prices were expected to reach a monthly average of $2.98 per MMBtu in February 2021.

"Higher expected prices in February reflect expectations of continued LNG exports and a shrinking surplus of natural gas in storage compared with the five-year (2016-202) average," said the report.

US working natural gas in storage ended October 2020 at more than 3.9 trillion cubic feet (Tcf), 5 percent more than the 2015-2019 average and the fourth-highest end-of-October level on record. ■