

LNG Unlimited

LNG JOURNAL PUBLICATION

2 June 2020

Swiss propulsion firm WinGD wins type-approval for new LNG engines

Online event involved guests joining from Beijing, Shanghai, Paris, Marseille and Switzerland
LNG Journal editor

Winterthur Gas & Diesel, the Swiss-based specialist marine propulsion company, has received type-approval for the biggest and most powerful LNG-powered engines ever built.

The French classification society Bureau Veritas awarded the approval for WinGD's dual-fuelled 12X92DF engines, the first series of which is currently being built by China State Shipbuilding Corp. (CSSC) and will power nine ultra-large container ships (ULCS) owned by the Marseille-based CMA CGM Group, a world leader in shipping and logistics.

Container power

"These vessels will become the largest container ships powered by liquefied natural gas and represent a significant step on the path to the energy transition of the shipping industry," said WinGD.

The type approval was awarded following a series of extensive full-load tests in diesel and gas operation.

"A virtual ceremony with guests joining from Beijing, Shanghai, Marseille, Paris and Winterthur in Switzerland marked the landmark moment for the engine technology, which has brought the use of LNG as a marine fuel into an entirely new vessel sector," said the Swiss company.

Nine 23,000 twenty-foot equivalent unit (TEU) vessels powered by LNG have been ordered by CMA CGM from Chinese shipbuilders as well as five dual-fuel vessels.



A virtual ceremony took place and involved WinGD's Frank Zhang and Ersin Eren of Bureau Veritas

"The certification ceremony marks a new stage in the construction of the CMA CGM's nine 23,000-TEU LNG-powered vessels," said CMA CGM.

"These vessels are the world's largest container ships powered by LNG," added the French shipping line.

"CMA CGM's ground-breaking choice in favour of LNG is a major step forward and a clear illustration of our resolute commitment to environmental protection and to the energy transition of the maritime industry," it stated.

Olivier Cartier, Technical Vice President, Bureau Veritas, said that the certification process of WinGD's 12X92DF engine was a long one due to the size and complexity of the engine.

"We mobilized our worldwide teams of engine specialists, especially in China, in France and in Germany, at each of the critical phases of the certification process," Cartier explained.

Klaus Heim, Chief Executive of WinGD, said that with the biggest LNG engines approved there are other possibilities opening up for ship owners opting for LNG-fuelled propulsion.

"This is an important step towards the sustainable energy tran-

sition within the shipping industry and we are incredibly proud of the role WinGD plays in this journey," said Heim.

Dominik Schneider, Vice President, for Research and Development at WinGD, said the X92DF engines offer the most sustainable emissions footprint currently available, outperforming expectations for nitrogen-oxide, sulphur-oxide, particulate emissions and with carbon-dioxide levels over 20 percent lower than for typical diesel engines.

"With its unique combination of Otto (lean burn) and Diesel cycle technology these engines can adapt for any of the potential sustainable fuels of the future making them a secure asset for a long time to come," added Schneider.

The development of the X92DF engine builds on the expertise and experience gained from more than 500,000 operating hours for WinGD's market-leading X-DF dual-fuel engine technology.

Uptake

"That landmark comes just under four years since the first engine went into service, highlighting the rapid uptake and remarkable reliability of WinGD's low-pressure concept," said the Swiss company.

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Malaysia's Petronas reports quarterly profits plunge even as LNG sales increase to 10 million tonnes

LNG Journal editor

Petronas, the Malaysian state-backed energy company with on-shore and floating liquefied natural gas plants, reported a near 70 percent fall in first-quarter profits as almost 10 million tonnes of LNG were sold amid declining crude oil and LNG prices.

Petronas said that profit after tax for the period from January through March 2020 fell to 4.5 billion Malaysian ringgit (\$1.03Bln) from 14.2Bln ringgit (\$3.25Bln) in the same period last year, a drop of 68 percent.

Challenges

Without the asset write-downs because of the market challenges of 4.67Bln ringgit (\$1.07Bln), profits would have totalled 9.2Bln ringgit (\$2.10Bln).

Petronas revenues for the quarter were 59.6Bln ringgit (\$13.65Bln), a decline of 4 percent on the 61.99Bln ringgit (\$14.20Bln) in the prior-year quarter.

The company's LNG and gas earnings performances are part of



Petronas President and Chief Executive Wan Zulkiflee

the Gas and New Energy division report. Petronas said quarterly pipeline natural gas sales were 13.4 percent lower at 2,566 million standard cubic feet per day compared with 2,962 mmscf per day in the 2019 first quarter.

"Malaysia average sales gas volume for the first quarter of 2020 was lower by 396 mmscf per day compared to the first quarter of 2019, mainly driven by lower off-take from power sector in Peninsular Malaysia," said Petronas.

LNG sales rose 6.5 percent in the quarter to 9.99MT compared with 9.40MT in the same three months of 2019.

Petronas has produced LNG at its Bintulu onshore LNG complex since 2013 and its FLNG plant offshore Sabah, giving combined production of more than 26 million tonnes per annum, making the nation the largest Asian producer and the fourth-largest exporter in the world after Australia, Qatar and the US.

The Malaysian company also receives LNG offtake as a shareholder in the Gladstone LNG export plant in Queensland, Australia. Its overseas volumes will also increase in the next few years when LNG Canada comes on stream.

"The gross LNG sales volume for

the first quarter was higher by 0.59 million tonnes compared to the first quarter, mainly attributable to higher trading activities as more opportunities arose due to increased liquidity," explained Petronas.

Gas and New Energy revenue was 22.5Bln ringgit (\$5.15Bln), down 8 percent from a year ago, mainly due to the impact of lower average LNG realised prices, partially offset by the effect of a weakening ringgit against US dollar.

Petronas President and Chief Executive, Wan Zulkiflee Wan Ariffin, said the company like others had suffered the ongoing effects of the Covid-19 pandemic and the collapse in oil prices.

"The oil and gas industry has been badly affected by the unprecedented twin shock of both supply and demand," he added.

"For our operations, we ensured that we continue to optimally operate our total business value chain, as safely and efficiently as possible, to fulfil the energy needs of the nation and to our customers globally," explained Wan Zulkiflee.

Canadian pipeline company completes equity sale and project financing for BC LNG plant feed-gas for Asia

TC Energy Corp. has completed project financing and the sale of a 65 percent equity interest in the Coastal GasLink pipeline project to supply feed gas for LNG shipments to Asia from the Canadian province of British Columbia.

"The Coastal GasLink Pipeline Limited Partnership has executed a credit agreement with a syndicate of banks extending non-recourse project-level financing to fund the majority of the construction costs for the project which, with the closing of the equity sale, are available to be drawn," said TC Energy.

"Together, these transactions have resulted in the company realizing immediate proceeds of

approximately C\$2.1 billion (US\$1.5Bln)," said Calgary-based TC Energy, one of the leading pipeline companies in North America.

The pipeline stake sale was to two equity funds, KKR-Keats Pipeline Investors II (Canada) Ltd. (KKR) and a subsidiary of Alberta Investment Management Corp. (AIMCo).

TC Energy is developing the 670-kilometre (416-mile) Coastal GasLink pipeline to deliver feed gas from the Dawson Creek area in northeast BC to an export facility near Kitimat, where the Royal Dutch Shell-led LNG Canada joint venture, currently under construction, will export the gas to global markets.

"TC Energy remains committed to partnering with the 20 First Nations who have executed agreements with Coastal GasLink and, as previously announced, has provided an opportunity for them to invest in the Project with an option to acquire a 10 percent equity interest in Coastal GasLink on similar terms as the 65 percent interest," said the company statement.

"The introduction of high-quality partners, establishment of a dedicated project-level financing facility, recovery of cash payments through construction for carrying charges on costs incurred and remuneration for costs to date are expected to substantially satisfy TC Energy's Coastal GasLink fund-

ing requirements through project completion," stated TC Energy.

Once completed, the pipeline will have an initial capacity of 2.1 billion cubic feet per day and connect abundant Western Canadian Sedimentary Basin natural gas supply from the Dawson Creek to the Shell-operated liquefaction plant near Kitimat.

Shell and its four partners, Mitsubishi Corp. of Japan, Malaysian energy company Petronas, Chinese major PetroChina and Korea Gas Corp., moved ahead with construction in 2019 at the brownfield site near Kitimat that had been an energy products terminal before being acquired by Shell in 2011.

Japan's imports fall led by Asia and Mideast

Japanese liquefied natural gas imports dropped by 8.8 percent last month and deliveries of thermal coal increased by almost the same volume as Asian and Middle East volumes plunged 30 percent year-on-year while Australian deliveries were steady.

Japan imported 5.13 million tonnes of LNG in April compared with 5.62MT in April 2019 as the government also implemented a state of emergency for the Covid-19 pandemic.

The nation had imported 7.20MT LNG in March 2020, down 1.2 percent from the 7.29MT received in March 2019.

The April volumes amounted to around 80 cargoes compared with the normal level of deliveries which at the start of the year had been 100 cargoes.

The latest monthly shipments cost 268.54 billion yen (\$2.49Bn), 14.2 percent less than the April 2019 import bill of \$312.89Bn yen (\$2.91Bn), according to the preliminary monthly trade figures from the Japanese Finance Ministry.

One of the main competitor fuels to LNG for power generation, thermal coal, posted an 8.1 percent increase in shipments in April to 9.13MT amid the LNG decline and as the Covid-19 restrictions also applied.

Nuclear power usage in Japan is still much reduced from the 50 units on line in 2011 to a handful now.

The number of nuclear reactors in operation in mid-2020 is falling from nine to four or five as Japan tightens safety restrictions and several plants close for upgrades, though it cannot rely on more nuclear power for the rest of the year.

Thai power firms line up to get LNG import licences

LNG Journal editor

The oldest industrial conglomerate in Thailand, the B. Grimm Group, has become the third independent company to receive a liquefied natural gas import licence as the sector is liberalized.

The B. Grimm Group said in a statement to the Stock Exchange of Thailand that it had been awarded a permit to import 650,000 tonnes per annum to the Map Ta Phut LNG import terminal in Rayong province.

Permits

Two other companies, the power producers Gulf Energy Development Public Co. and Hin Kong Power, have previously been awarded licences to import a combined 1.7 million tonnes per annum.

Thailand's national oil and gas company, PTT, had previously been in the only importer to the Map Ta Phut regasification facility, which has storage capacity for 11.5 MTPA of LNG.

A second LNG terminal adjacent to the existing Map Ta Phut facility with a capacity of 7.5 MTPA is



Preeyanart Soontornwata is President of B. Grimm Power

under construction and is expected to start operations by 2022.

A third Map Ta Phut expansion is also in the design phase, undergoing a feasibility study.

The Thai B. Grimm Group has been operating in the country since 1878 and the LNG licence was first applied for by the B. Grimm Power Co. subsidiary in 2016.

Preeyanart Soontornwata, the President of B. Grimm Power, said the company planned to use the LNG acquired through the licence to fuel five gas-fired small power producer (SPP) plants under construction.

SPP plants in Thailand sell elec-

tricity to the state grid at up to 90 megawatts, while the remaining capacity can be sold to private buyers through a private power purchase agreement.

The five Grimm Group plants, all in the Eastern Economic Corridor, had their concessions renewed by the Energy Regulatory Commission earlier in 2020.

"B.Grimm acquired an LNG Shipper licence from the ERC in the amount of 650,000 tons per year for supplying the LNG to the company's combined cycle power plants from 2022," said that statement from the company President, Mrs Preeyanart.

Indian LNG imports drop and shipment costs were much lower

Indian liquefied natural gas imports dropped by almost 30 percent last month and the import bill was also half what it was in April 2019 as the Covid-19 pandemic resulted in a lockdown and affected trade activities.

LNG import for the month of April amounted 1.44. million tonnes, or around 20 cargoes, which was 29.4 percent lower than April 2019 when 2.04MT, or 29 cargoes, were delivered, according to provisional data from the Ministry of Petroleum and Natural Gas.

The LNG deliveries to India came mainly from Qatar, Australia, the US and West Africa.

The cost of the April 2020 cargoes amounted to around \$400 million compared with \$800M in April 2019.

The Ministry said that gross production of natural gas for April 2020 was 2.161 billion cubic metres, a drop of 18.6 percent compared the same month a year ago when output totaled 2.656 Bcm.

The total of LNG imports has been rising to more than 350 cargoes a year as more infrastructure is constructed, including pipelines to reach more industrial and city-gas customers.

The main operating terminals on India's West Coast are at

Dahej, Hazira and Dabhol, near Mumbai.

The newest terminal at Mundra, north of Mumbai, and is now operational and awaiting more shipments.

There is additionally the Kochi facility in the southwest state of Kerala and one East Coast terminal at Kamarajar, 25 kilometres north of Chennai Port in Tamil Nadu, and also known as Ennore.

Indian LNG imports in March 2020 had increased by more than 20 percent to 2.12MT from 1.76MT in the same month of the previous year.

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NEWS NUDGES

Charter rates are steady

Shipping charter rates for LNG carriers in the spot market were steady. Rates were quoted at an average of between \$33,000 per day and \$30,000 per day West of Suez and at rates of between \$32,000 per day and \$29,000 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 \$43,000 per day. Brokers said West of Suez activity included a handful of fixtures and free-on-board transactions.

Norwegian plant restart

Equinor of Norway said it would restart Europe's only baseload LNG export plant at Hammerfest on June 18 after scheduled maintenance of several weeks has been completed. Equinor's liquefaction plant shut-down reduced natural gas production by 18 million cubic metres per day from the Snohvit feed-gas field. The single-Train Hammerfest plant supplies cargoes to LNG import terminals such as those in Spain and in northwest Europe from the Netherlands to Lithuania.

Gladstone award for KBR

Energy engineer KBR was awarded an energy efficiency study from Australia's Santos for its Gladstone LNG plant on Curtis Island in Queensland. KBR will assist GLNG in identifying potential modifications to boost the operations at the facility through improvements to thermal efficiency while also accounting for the associated reduction in carbon emissions. GLNG is a joint venture of Santos, Malaysia's Petronas, France's Total, and Korean Gas Corp.

Japanese LNG-powered rocket makes progress in development as tests may shows it could aim for the stars

LNG Journal editor

Interstellar Technologies, a Japanese start-up company, has test fired an LNG-powered rocket at its site on Japan's northernmost main island of Hokkaido in a move that has captured public support for the commercial space race.

The rocket engine was fired at 70 percent of full power for five seconds and the LNG, of which Japan is the world's largest importer, burnt fiercely and safely in the test in mid-March 2020.

Orbit

Interstellar plans to use the LNG engine for its Zero satellite launch vehicle, scheduled for take-off in 2023, according to the Japanese Nikkei financial publication.

"The company is developing the technology and aims to become a global pioneer in rockets powered by LNG," said the Nikkei report.

The start-up employed an ethanol engine for a previous full launch of its Momo-3 suborbital rocket, which reached an altitude of 100 metres.

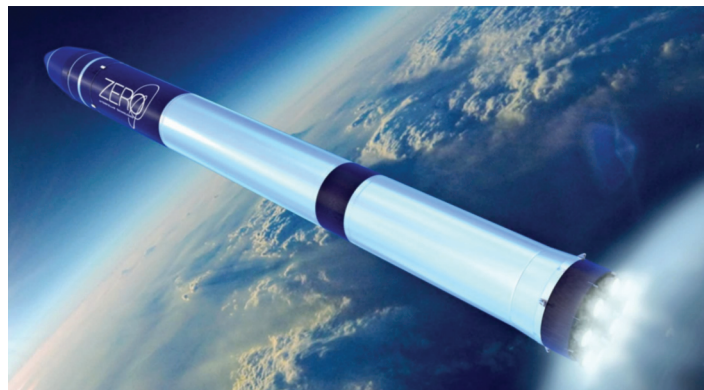
The Japanese report said that the new LNG-powered rocket, named Zero, weighs 36 tons and is more than 30 times heavier than the Momo-3 rocket.

"It must be able to maintain a speed of 8 km per second at its peak altitude of 500km for a successful satellite launch," said the report.

This makes LNG ideal as it is a more energy-dense fuel than ethanol.

Japan is still the largest LNG importer with annual deliveries amounting to almost 80 million tonnes, while China is in second place with about 60 MTPA and South Korea is in third.

"LNG, which is composed mainly of methane, is relatively inexpensive, at less than \$3 per kilogram - one-tenth the price of the highly refined kerosene used in some



Company aims to put the Zero rocket into orbit by 2023

rockets," said the Nikkei report.

"As tests can burn tens of thousands of dollars in fuel, finding ways to reduce these costs is vital," said the report, citing Interstellar Technologies.

LNG also is environmentally friendly in comparison to other fuels.

"It vaporizes if spilled, preventing soil or water pollution, and generates lower carbon dioxide emissions when burned," said the report.

Nikkei noted that this was not Japan's first attempt to commercialize an LNG-fuelled engine.

A private-public partnership, including the Japan Aerospace Exploration Agency, and heavy machinery maker, the IHI Group, planned to use the fuel in the second stage of its GX rocket development which ran from 2003 to 2009.

"Internal friction and slow decision-making led to repeated delays on the project, and the estimated cost ballooned from 45 billion yen (\$418 million at current rates) to more than 100 billion yen (\$930M). The government ultimately scrapped the plan," explained the report.

Though the GX failed to make it past the planning stage, Japan's equivalent of NASA continued development of the LNG rocket engine at Kakuda Space Center in Miyagi Prefecture.

A joint research operation with Interstellar then began in fiscal

2018 at the space center, providing the company with access to the agency's equipment and its past test data.

"What Interstellar really wanted was the technology behind the fuel injector and the turbo pump that sent the fuel from the tank to the combustion chamber," said the report.

"These components are difficult to produce from scratch. The company seeks JAXA's know-how to clear this hurdle inhibiting private-sector rocket development," it added.

The report explained that with the entry of Elon Musk's SpaceX in the US, roles have now been carved for the public sector in space development.

While businesses are taking the lead on missions in low orbit, such as for the International Space Station, NASA is shifting towards lunar and planetary exploration.

The Interstellar project has also captured the support of the Japanese public.

The company is not eligible for financial backing from the Japanese government and a crowd-funding campaign was launched on May 2 to support Interstellar's fixed costs and research operations.

It raised 20 million yen (\$186,000), more than double the goal of 9 million yen, from 1,500 people in just a day and a half.

LNG operator Santos is given price cut to buy the North Australian assets of ConocoPhillips

LNG Journal editor

Australian LNG operator Santos has completed the acquisition of the northern Australia and Timor-Leste assets of US major ConocoPhillips for a reduced purchase price of US\$1.265 billion because of the oil price slump.

The completed transaction also includes an increased contingent payment of US\$200 million subject to a final investment decision (FID) on the Barossa project to supply feed-gas to the Darwin LNG plant.

Volatility

“Due to recent market volatility and the deferral of Barossa FID, Santos and ConocoPhillips agreed to decrease the previously announced US\$1.39Bn upfront payment at completion to US\$1.265Bn and increase the contingent payment on Barossa FID from US\$75M to US\$200M,” they explained.

At completion, the net settlement amount was US\$655M, lower than the previously forecast amount of US\$800M, comprising the revised firm purchase price of US\$1.265Bn less cash in the acquired business.

“The acquisition delivers operatorship and control of a high quality portfolio of low-cost, long-life natural gas assets and strate-



Bayu-Undan gas field in Timor Sea supplies Darwin LNG

gic LNG infrastructure,” said Santos.

The Adelaide-based company said its interests in the Bayu-Undan gas field and the Darwin LNG plant increase to 68.4 percent and would provide a significant boost to 2020 production and cash flows.

The Santos stake in the Barossa project to backfill Darwin LNG increases to 62.5 percent.

“As a foundation partner in Bayu-Undan and Darwin LNG, and an existing partner in Barossa, we know these assets well,” said Santos Managing Director and Chief Executive Kevin Gallagher.

Darwin LNG buyer Santos is an experienced industry participant through its existing stake in the Darwin project, its operatorship of

the Gladstone LNG export plant in Queensland and its stake in Papua New Guinea LNG.

“We are delighted to assume operatorship (of Darwin LNG) and continue to progress the Barossa project so that a final investment decision can be made when market conditions permit,” added Gallagher.

“We welcome the ConocoPhillips’ Australia-West employees to Santos and look forward to getting on with the process of integrating our two businesses to create one high performing team,” stated the CEO.

ConocoPhillips is only pulling out of the Northern Australia market and will retain its 37.5 percent interest in the Australia Pacific LNG export plant in Queensland,

and the operatorship of that project’s LNG facility.

Its APLNG partners are China’s Sinopec and Origin Energy of Australia.

Santos has previously announced an agreement to sell a 25 percent interest in Darwin LNG and Bayu-Undan to SK E&S of South Korea for US\$390M and the signing of a letter of intent to sell a 12.5 percent interest in Barossa to Japan’s Largest LNG importer JERA Co Inc.

“Santos continues to build alignment between the Darwin LNG and Barossa joint ventures. Following completion of the previously announced sell-downs to SK E&S and JERA, Santos will hold a 43.4 percent interest in Darwin LNG and a 50 percent interest in Barossa,” explained Gallagher.

“We are continuing to advance discussions with other parties for the sale of further equity in the Barossa project in line with our previously stated target ownership level of around 40 percent to achieve increased partner alignment and prudent future allocation of growth capital,” he stated.

Santos said Credit Suisse (Australia) Limited and J.B. North & Co. acted as its financial advisors for the ConocoPhillips deal and Allens acted as legal advisor to Santos.

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LNG Unlimited Data

UK terminal seeks bids for capacity by June 15

The largest European LNG import terminal, the UK Isle of Grain facility located southeast of London, has launched the second phase of an on-going open season during which the market is invited to make bids with less than a month before the deadline.

Grain LNG is offering up to 300 gigawatt hours per day (7.2 million tonnes per annum of LNG) of redelivery capacity and 380,000 cubic metres of associated storage, to be made available from mid-2025.

"The capacity on offer is a combination of new build and existing capacity which comes out of contract in 2025," said the company.

"UK terminals have seen a considerable increase in utilisation recently as new global supplies have come online and the economics of moving LNG from the Atlantic to the Pacific basin have failed to stack up," it explained.

The expansion will increase the size of the terminal, located on the Isle of Grain in Kent on the Thames-Medway estuary, to about 1.2 million cubic metres.

"During these unprecedented times, we believe the demand for LNG importation capacity remains strong," said Nicola Duffin, Commercial Manager for Grain LNG.

"The flexibility offered by Grain LNG's large storage tanks, and the benefit of our location in South East England, means our facility continues to be of interest to market participants," she added.

"We are delighted therefore that we have received the required regulatory approvals to proceed to the next phase. Final and binding bids are required by 15th of June 2020," stated Duffin.

Höegh LNG says market still solid for FSRU-backed project plans

LNG Journal editor

Höegh LNG, the Norwegian project company and fleet owner, said the market for floating LNG import solutions was still solid and it was progressing with ventures in Latin America, the Mediterranean region and Australia as it reported first-quarter gross income of \$59.6 million and a net loss of \$1M.

Höegh noted positive events in its statement such as being selected as a preferred bidder for two new floating storage and regasification (FSRU) projects in Latin America.

Regions

The company said one of the Latin American ventures has a start-up scheduled for 2021-2022 and the second for 2023.

Höegh also said that the developer of the Port Kembla LNG terminal proposed for the Australian state of New South Wales, Australian Industrial Energy, had modifications approved by regulators to boost capacity.

The modifications to the original development consent will satisfy the market need for more gas during the cooler winter months.



Australian and Japanese organizers of Port Kembla project

This Australian project is backed by the world's largest LNG purchaser, JERA Co. Inc. of Japan, the Japanese trading house Marubeni Corp and Australian mining billionaire Andrew Forrest's Squadron Energy.

Höegh also said in its overview of quarterly events that French major Total had reached a final binding agreement with the company to settle a boil-off gas dispute.

"While the Covid-19 crisis has caused major disruptions and uncertainties to the energy markets, the demand for FSRUs does not appear to have been significantly affected, as can be seen by the selection of Höegh LNG as preferred bidder for two new FSRU

projects in the quarter," said Höegh President and Chief Executive Sveinung J.S. Stohle.

The company said in its earnings presentation that the floating LNG import project for the Mediterranean Island of Cyprus was still on track for a start-up in 2012.

Höegh has applied for an infrastructure ownership, operations and development licence for the joint venture at the port of Vasilikos.

Höegh pointed out that the FSRU could stay on location as a bridging solution or for an extended period serving different customers on Cyprus as well as break bulk services and delivering LNG to other customers in the region.

Flex LNG swings to a loss but is confident demand will improve

Flex LNG, the growing Norwegian-listed fleet owner backed by shipping magnate John Fredriksen, posted a first-quarter loss of \$14.87 million as vessel operating revenues also fell.

The Flex LNG operating revenues dropped by 26 percent to \$38.2M compared with \$52.0M in the last quarter of 2019.

Shipping asset of Flex LNG consist of six LNG vessels in operation and seven newbuilds under construction.

The company's vessel purchase prepayments amount to \$349.5M for the newbuildings.

Flex said it had total interest-

bearing debt of \$771M, of which \$35.7M is due in the next 12 months.

"The LNG freight market continues to be affected near term by a combination of the glut of LNG and reduced demand due to the Covid-19 pandemic," said the company.

However, Flex said it remained well capitalized with a \$121M cash position and \$910M in attractive long-term financing for the seven newbuilds with remaining capital expenditure of \$937M.

"The LNG market has been very challenging this year due to another mild winter and the global

Covid-19 pandemic," said Oystein M Kalleklev, Chief Executive of Flex LNG Management AS.

"We have witnessed unprecedented demand destruction due to shut-downs of all major economies and more specifically shut-ins of cargoes due to historically low gas prices," added CEO Kalleklev.

"These factors have adversely affected the demand for shipping and thus consequently freight rate levels. Despite this turmoil, we have been able to run our ships without any disruptions and deliver cargoes to our customers safely and on time," stated Kalleklev.

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Qatar Petroleum confident on LNG market and delayed expansion contract awards still set for 2020

LNG Journal editor

Qatar Petroleum President and Chief Executive Saad bin Sherida Al-Kaabi said that Qatar had delayed commercial bidding deadlines for its LNG expansion plans but contracts would still be awarded in 2020 as he saw the market rebounding and the Gulf nation's own shipments would keep flowing.

Speaking during a US-Qatar Business Council webcast discussion on the impact of the oil price fall and the Covid-19 pandemic on economies, Al-Kaabi said Qatargas would not be cutting production nor deliveries because of costs.

Long haul

"We're in for the long haul and I am still confident in the long-term view," said Al-Kaabi.

He stated that Qatar could even expand its production capacity proposals further than the current 126 MTPA currently planned in two stages.

He added that technical bids had been received from the main contractors for the expansion, but commercial bids expected in April had been pushed back by three or



Gulf nation's big LNG expansion plans are still on track

four months after bidders asked for a delay.

Engineering bids for the Qatar expansion are now scheduled to be submitted in September or October and would be awarded by the end of 2020.

The Qatar Petroleum CEO also stated that he was not concerned about the impact of low prices on the Golden Pass LNG export plant the company is developing with ExxonMobil at the existing import terminal in Texas.

"The way we have structured Golden Pass and our portfolio, we're not worried at all," he said.

"Having more gas deliveries out of the US is going to be good for us," added Al-Kaabi.

He said that in regard to delayed final investment decisions in the US, the companies most at risk are those with a single export development.

"In rough markets they're not going to make it," he said, explaining that companies with a global portfolio and an integrated gas business would benefit most from exporting US LNG.

He maintained, however, that Qatargas and its Ras Laffan plant are the most economic producers in the world.

"We are the cheapest LNG producer, from an efficiency point of view and from a cost of production point of view," said Al-Kaabi.

The Qatar LNG expansion involves production increasing from

the current 77 MTPA to 110 MTPA and then to 126 MTPA by 2027.

Qatar has started developing its drilling campaign for the Persian Gulf feed-gas from the North field that will underpin the liquefaction needs.

A second phase of the North Field LNG expansion, called the North Field South Project (NFS), will further increase Qatar's production capacity.

The scope of the first phase of the expansion at the Ras Laffan complex involves an additional four Trains, each with 8.0 MTPA of output.

Qatar is also expected to have partnerships with international energy majors for its expanded North Field-based projects.

The Qataris have the southern portion of the North Field in Gulf waters and the other part is under the jurisdiction of neighbouring Iran.

Al-Kaabi noted that Qatar could even expand its production capacity further if it wished.

"There is room to go above 126," he said. "You might hear us in a few years go higher, we have plenty of gas to do that," he stated.

LNG and industrial gases company Air Products extends Seifi Ghasemi's leadership into 2025

Air Products, the US global leader in the supply of liquefied natural gas process technology and equipment and the owner and operator of industrial gases projects, has extended the term in office of Chairman, President and Chief Executive Seifi Ghasemi through to September 30, 2025.

Iranian-born Ghasemi, aged 74, was named to his posts in 2014 and has led the company through a transformation over the past six years as it has started gasification ventures in China and Saudi Arabia as well as being involved in the worldwide build-out of LNG liquefaction plants.

This is the second time Ghasemi has had his work contract extended. In November 2017, Air Products entered into an amended and restated employment agreement with Ghasemi through September 30, 2022. This new amendment agreement extends Ghasemi's term by another three years.

"Under Seifi's strong leadership, Air Products continues to perform at an exceptional level and deliver on its commitments in numerous areas, including financial performance, global growth, inclusion, technology, employee development and shareholder returns, to name a few," said Chad

Deaton, lead director. "The Board understands the importance of maintaining continuity as the company pursues even greater growth globally, and clearly, Seifi Ghasemi provides that strong leadership and direction," stated Deaton.

Ghasemi said he was "honored" to be given the opportunity to lead Air Products for at least another five years.

"I cannot imagine a more professional, dedicated and committed group of people to work with every day. They are a winning team, and I am proud to be part of it, working together and winning together," he said.

Ghasemi was born in the Iranian city of Mashhad and first came to the US as a graduate student at Stanford University, where he received his master's degree in mechanical engineering and worked in the steel industry in Iran.

He later fled from Iran with his family in 1978 when Islamic revolutionaries overthrew the Shah and he eventually settled in the US.

Ghasemi worked with Airco, a company which was taken over by industrial gases group BOC, where he became President of BOC's Americas unit.