LNG Unlimited

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Qatar Petroleum explains next steps on expansion and tenders

North Field expansion will increase the Arab Gulf nation's LNG output to 110 MTPA

LNG Journal editor

CEO Al-Kaabi: Qatar plant set for historic expansion

Qatar Petroleum has issued an invitation to tender for the reservation of ship construction capacity mainly in South Korea for an initial 60 new LNG carriers to transport its volumes from the expansion of its Ras Laffan liquefaction plant in the Middle East and its Golden Pass facility in the US Gulf Coast.

The company said the tender also included options for replacement requirements for Qatar's existing LNG fleet.

Deliveries

Qatar Petroleum's North Field Expansion (NFE) project will increase the Arab Gulf nation's LNG production capacity from 77 million tonnes per annum to 110 MTPA starting in 2024.

In addition to addressing shipping requirements for the North Field Expansion Project, the tender covers shipping requirements for the LNG volumes that will be purchased and marketed by Ocean LNG, a joint venture between Qatar Petroleum and ExxonMobil from the Golden Pass facility currently under construction for start-up in 2014.

The Golden Pass plant was originally designed as an import facility located on the Sabine-Neches Waterway in Texas before the shale-gas revolution.

It is now being reconfigured at a cost of more than $10 billion to export up to 15.6 MTPA of LNG from an initial three Trains with the Ocean LNG venture trading the cargoes worldwide.

"With this significant step, Qatar Petroleum embarks on another major LNG shipbuilding campaign expected to initially deliver 60 LNG carriers in support of the planned production expansion, with a potential to exceed 100 new LNG carriers over the next decade," said Saad Sherida Al-Kaabi, the President and Chief Executive of Qatar Petroleum.

"This important initiative reinforces Qatar Petroleum's commitment to its global reputation as a safe and reliable LNG producer at all times and under all circumstances," added Al-Kaabi.

Korean shipyard executives were previously sounded out by Qatar Petroleum executives on freeing up berths over the next 12 months for a wave of Qatari LNG newbuilds.

Samsung Heavy Industry, Hyundai Heavy Industries and Daewoo Shipbuilding & Marine Engineering are set to receive orders, even as Hyundai and Daewoo may eventually merge under a Korean shipyard consolidation plan.

The Korean yards specialize in constructing the Qatari Q-Flex and Q-Max tanker with between 210,000 cubic metres and 266,000 cubic metres capacity.

A South Korean government spokesman said that the Qataris had outlined their LNG carrier building plans at the start of 2019 during a bilateral summit in Seoul.

Between 2004 and 2007, Qatar ordered 45 LNG carriers from the Korean yards when Daewoo built 19 Qatari carriers, Samsung constructed 18 vessels and Hyundai received orders for eight ships.

The scope of the expansion at the Ras Laffan production complex involves an additional four liquefaction Trains, each with nameplate capacity of 7.8 MTPA.

Qatar Petroleum said it had entrusted its subsidiary Qatargas to execute this LNG ship building program on its behalf.

Historic

"This tender, along with the recently released Engineering, Procurement and Construction tender for four new mega-Trains planned as part of the North Field expansion, constitute two monumental and historical milestones as we make major strides in our commitment towards the further development of the world's largest non-associated gas field," stated Al-Kaabi. ■

UNLIMITED AGENDA

Venture Global of US now plans third export plant in state of Louisiana called Delta LNG

LNG Journal editor

Venture Global, the US LNG project developer with two export plants proposed for Louisiana, has filed with regulators to permit its construction of a third plant in the Gulf Coast state.

The Arlington, Virginia-based company filed with the Federal Energy Regulatory Commission for a venture called Delta LNG and its associated Delta Express pipeline.

Calcasieu Pass

The company's first and most advanced plant is at Calcasieu Pass in Louisiana with current nameplate export volumes of 12 million tonnes per annum and is expected to come on stream in 2022, along with associated facilities, including the TransCameron Pipeline.

Venture Global, owned by former investment banker Michael Sabel and lawyer Robert Pender who act as joint chief executives, is also constructing a second plant at Plaquemines near river milemarker 55 on the west side of the Mississippi River, 30 miles south of New Orleans.

The Mississippi River project has current output targets of 20 MTPA of LNG and was set to include small-scale liquefaction Trains, four LNG storage tanks and three marine loading berths.

Former investment banker Michael Sabel (left) and lawyer Robert Pender act as joint CEOs of Venture Global

The Delta LNG plant is also proposed for Plaquemines Parish and would have peak capacity to process 24 MTPA.

The filing made on April 17 also requested the start of a permit process for a 287-mile pipeline called Delta Express between Perryville in Louisiana, crossing into the neighbouring state of Mississippi, and then back into Louisiana to connect to the LNG plant.

According to a preliminary schedule the third Venture Global project could see construction start in late 2021 and the plant shipping its first cargo by November 2024.

Venture Global had in March 2019 that it planned to expand the scope of its LNG development business on the US Gulf Coast to 60 MTPA of production based on customer demand, almost doubling current plans for 32 MTPA of output.

Co-CEOs Pender and Sabel said that having fully contracted Calcasieu Pass and anticipating completion of Plaquemines LNG an expansion was being studied to meet additional customer demand.

"We believe our model of mid-scale modular liquefaction is the future of low-cost LNG production," they said.

Venture Global noted that the Calcasieu Pass project with its planned 10 MTPA of output had received all federal authorizations.

The project's engineering contractor, Kiewit Energy of Omaha, Nebraska, is now carrying out site preparation in advance of construction.

The Calcasieu Pass plant has signed binding 20-year sale and purchase agreements with companies such as Royal Dutch Shell, BP of the UK, Italian utility Edison, Portugal's Galp Energia, Repsol of Spain and Poland's national oil and gas company.

The Plaquemines project is expected to receive its final regulatory authorization in August and commence construction later in 2019.

Rio Grande LNG export project in Texas receives engineering bids from Fluor Corp. and Bechtel

NextDecade Corp. said it received bid packages from US companies Bechtel Inc. and Fluor Corp. relating to the engineering, procurement and construction contracts for its Rio Grande export project in Texas.

The technical and commercial bid packages are for lump-sum, turnkey contracts for the venture near the port of Brownsville.

The Brownsville plant will produce around 27 million tonnes per annum of LNG and the company's affiliated Rio Bravo Pipeline in South Texas is also planned.

NextDecade said it expected to select a contractor and execute a full lump-sum EPC contract in the third quarter of 2019 when it also anticipates making a positive final investment decision.

"McDermott, a third potential bidder, was required to finalize a joint venture partnership prior to submitting its bid. As a result of not having satisfied this condition, McDermott did not submit a bid package," explained NextDecade.

NextDecade also recently signed a 20-year sale and purchase agreement with Royal Dutch Shell.

Shell will purchase LNG on a free-on-board basis whereby it provides its own shipping starting from the commercial operation date of Rio Grande LNG, currently expected in 2023.

NextDecade said that around three-quarters of the purchased LNG volumes will be indexed to the North Sea Brent crude price and the remaining volumes indexed to US natural gas prices, including the benchmark Henry Hub.

NextDecade has a second Texan export venture under development called Galveston Bay LNG.

The Galveston Bay project will include a 97-mile affiliated pipeline to move 3 billion cubic feet of natural gas per day from the Katy Hub in Waller County, while the liquefaction plant is proposed for a 550-acre site along the Texas City Ship Channel.

Chicago firm Exelon sees LNG project in progress

The US Annova liquefied natural gas export project planned for the south bank of the Brownsville Ship Channel in Texas, and whose owners include Chicago-based power company Exelon Corp., is expected to be given the go-ahead after receiving a final environmental impact statement from regulators.

The Annova project is expected to ship around 6.95 million tonnes per annum from its proposed liquefaction and export plant.

The joint venture proposes the construction of six small-scale liquefaction Trains as well as an interconnected pipeline and marine export facilities.

The Federal Energy Regulatory Commission said that with suitable mitigation measures the environmental impacts from the export venture could be reduced or contained.

"We determined that the construction and operation of the project would result in adverse environmental impacts.

Most impacts on the environment from the proposed project would be reduced to less than significant levels with the implementation of Annova's proposed impact avoidance, minimization, and mitigation measures and the additional measures recommended by FERC staff," said the FERC.

However, the FERC statement noted that there was scope for additional short-term environmental impacts from the cumulative noise from several LNG projects being developed in the area of the Brownsville Ship Channel.

Sempra given approval to build Port Arthur export facility in Texas

LNG Journal editor

Sempra Energy, the California utility developing LNG export plants in the US and Mexico, said its Port Arthur LNG project in Texas that will supply nations such as Poland received authorization from the Federal Energy Regulatory Commission to proceed with construction.

The Port Arthur venture in Jefferson County will comprise an initial two liquefaction Trains, up to three LNG storage tanks of 160,000 cubic metres capacity and associated facilities that will enable the export of about 11 million tonnes per annum of LNG.

FERC clears way for building of pipelines and plant

Pipelines

The FERC order also approved the construction of the Texas and Louisiana connector pipeline projects that will provide natural gas transportation for the new liquefaction facilities.

"With the FERC order and the commercial momentum of the Port Arthur LNG project, we are one step closer to reaching a final investment decision and delivering low-cost, reliable and clean US natural gas to world markets," said Carlos Ruiz Sacristan, Chairman and Chief Executive of Sempra North American Infrastructure.

"Port Arthur LNG should help us achieve our goal to become one of the largest exporters of North American LNG," he added.

"We are grateful to all of our stakeholders for supporting this important infrastructure project that is expected to create thousands of jobs and provide economic benefits for years to come," stated the CEO.

The Port Arthur facility is one of three export ventures being developed by Sempra and its partners in addition to Cameron LNG in Louisiana, which is expected to ship its first cargo soon, and the Costa Azul plant on the Pacific Coast of Mexico.

Port Arthur already has its first firm foundation customer in the Polish Oil & Gas Company.

The Poles signed a definitive 20-year sale-and-purchase agreement in December 2018 for 2 MTPA of LNG from the facility.

Sempra has selected Bechtel Inc., the leading LNG engineering, procurement and construction company, to build the plant.

Sempra, whose headquarters are in San Diego, has a strategy to achieve around 45 MTPA of LNG production by the mid-2020s through its three plants and their related expansion projects.

Tellurian welcomes FERC permit for Driftwood venture in Louisiana

Tellurian Inc. said it welcomed the issuing of the order from the US Federal Energy Regulatory Commission granting authorization for its Driftwood LNG export project to go ahead at Lake Charles in Louisiana.

The company aims to construct a liquefaction facility to produce 27.6 million tonnes per annum of LNG and an associated Driftwood inter-connection pipeline of 96 miles in length.

"Tellurian thanks FERC and other state and federal agencies for their diligence and for working alongside our team over the past three years to ensure that we bring the Driftwood project to the market safely and efficiently," said Chief Executive Meg Gentle.

"We look forward to beginning construction and delivering first LNG in 2023," said the CEO.

Tellurian is additionally building two separate hub pipelines, the Permian Global Access Pipeline and the Haynesville Global Access Pipeline.

It recently launched an open season for the Permian pipeline to test demand and it runs until Friday, May 24.

The Permian Access project is a proposed 42-inch diameter interstate natural gas pipeline originating at the Waha Hub in Pecos County in Texas and terminating at Gillis in Louisiana, north of Lake Charles. The pipeline connects the prolific Permian Basin in Texas to the growing natural gas market in southwest Louisiana.

The Permian pipeline and the Haynesville Global Access Pipeline will each cost around $3.7 billion to construct.

Both pipelines will have capacity to transport at least two billion cubic feet of natural gas a day.

In addition to spending 7.4Bln on the two pipelines, Tellurian is developing the liquefaction plant with total investments of around $15.2Bln and the provision of about 15,000 jobs.

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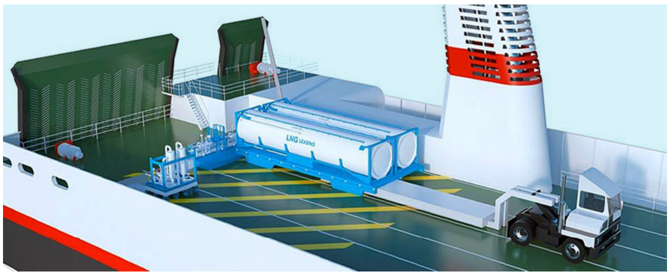

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NEWS NUDGES

MOL takes Indian stakes

Japanese LNG fleet owner Mitsui OSK Lines has signed a deal with Indian conglomerate Reliance Industries to take over joint ownership of six Very Large Ethane Carriers (VLECs) currently owned by Reliance special purpose limited liability companies. “This investment would enable MOL to add six unique VLECs, which we have been operating for some time now, to our existing fleet of over 850 vessels, including LNG carriers, other tankers, dry bulkers, car carriers, ferries and coastal RoRo ships and cruise ships,” said Takeshi Hashimoto, a board member of MOL and an Executive Vice President.

Japanese name carrier

Mitsubishi Heavy Industries said its Yokohama shipyard held a christening ceremony for a third LNG carrier to be operated by Nippon Yusen Kabushiki Kaisha (NYK Line) for the Japanese utility companies, Toho Gas and Tohoku Electric Power. Mitsubishi said that after completion and handover in May, the “Diamond Gas Sakura” will join their first two ships, the “Diamond Gas Orchid” and “Diamond Gas Rose”, in transporting LNG for the US Cameron LNG export plant in Louisiana set to start commercial operations for Sempra Energy and partners.

NYK Line ship order

French storage technology company GTT has received an order from the South Korean Hyundai Samho Heavy Industries shipyard for the tank design of an LNG carrier on behalf of the Japanese ship-owner Nippon Yusen Kaisha, NYK Line. GTT said its Mark III Flex membrane containment system had been selected to equip the vessel with a capacity of 174,000 cubic metres and delivery scheduled for the end of 2022.

Chart increases its order book along gas value chain and ramps up for US and Asia LNG

LNG Journal editor

Chart Industries, the US liquefied natural gas equipment-maker and supplier to the liquid gas sector, said it would be ramping up manufacturing to meet new LNG project orders on the Gulf Coast and in Asia, while more business is expected in trucking and rail transportation of the fuel.

Chart said first quarter 2019 orders rose 60 percent year-on-year to $461.2 million as the company booked $135M in equipment orders, including for Venture Global’s Calcasieu Pass export project in Louisiana.

Number	Project	Chart Customer	Operator	Size	Chart Content	Expected Timing of Chart orders
1	Calcasieu Pass	BHGE	Venture Global	10 MTPA	18 cold boxes, BAHX	Throughout 2019
2	Driftwood	Bechtel	Tellurian	27 MTPA	IPSMR, cold boxes, BAHX, ACHX	Q2/Q3 2019 for 1st phase
3	Gimi (Tortue)	Black & Veatch	Golar	3.75 MTPA	4x Cold boxes, BAHX	1H 2019
4	Magnolia	LNG Ltd	LNG Ltd	8 MTPA	Cold boxes, BAHX, core-in kettles	1H 2019
5	Corpus Christi Stage Three	KBR	Cheniere	9.5 MTPA	IPSMR, cold boxes, BAHX, ACHX	2H 2019 -1H 2020
6	Pointe LNG	EPC TBD	Pointe LNG	6 MTPA	IPSMR, cold boxes, BAHX, ACHX	2020
7	FL small scale LNG Expansion	EPC TBD	Confidential	250,000 gpd	C250N, Cold boxes, BAHX, ACHX	2H 2019
8	FL ssLNG	EPC TBD	Confidential	500,000 gpd	C500 IPSMR, cold boxes, BAHX, ACHX, tanks	2H2019-1H 2020
9	SE Asia LNG (+expansion)	EPC TBD	Confidential	3 MTPA (+8MTPA expansion)	IPSMR, cold boxes, BAHX, ACHX	2H 2019-1H 2020
10	Liquefaction and distribution project	Black & Veatch	Confidential	Confidential	BAHX, loadout systems, coolers and trailers	2H 2019

Chart has success in 10 projects being developed in the US and various regions of Asia and Europe

Keppel order

Another new order valued at around $20M came in for Golar LNG’s floating LNG hull, the “Gimi”, a conventional carrier being converted at the Keppel shipyard in Singapore.

Chart, whose headquarters are near Atlantic, Georgia, said the quarter was also marked by long-term agreements with two key LNG fueling system customers for trucking applications.

Additionally, a memorandum of understanding was signed with Indian Oil Corp. to develop LNG infrastructure for transport, storage and liquefaction in India.

Chart also took restructuring and acquisition charges in the quarter that affected its net income levels.

Net income for the first quarter dropped to $900,000 compared with $5.8M in the same three months of 2018 amid several charges taken, including $8.9M for restructuring and transaction-related costs and a further $3.9M for the integration of its Italian acquisition, VRV.

“We are ramped up to begin the manufacturing for the 'big LNG' project orders announced, as well as others in the pipeline,” said Chart Chief Executive Jill Evanko.

“With increasing activity related to ‘big LNG’ and continued order strength across the base business, we are at near record backlog levels,” added the CEO.

Chart raised its 2019 “big LNG” order pipeline expectations to between $600M to $800M from the previous $400M to $500M.

“We continued to see order strength across the end markets in Energy & Chemicals and Distribution & Storage, building upon our unique position as an industrial manufacturing company with a complementary energy presence that serves the liquefaction, storage and transport of LNG and industrial gas infrastructure,” explained the company.

“We were also notified that we won an order for $30M related to air-cooled heat exchangers for another 'big LNG' project with Bechtel as the EPC contractor,” said Chart.

“Our order pipeline continues to take shape, with increasing potential in 2019, driven by positive trends in the first quarter from the Federal Energy Regulatory Commission and several LNG export terminal operators moving towards final investment decisions,” stated the company.

Chart said it was also helped by President Donald Trump’s recently signed executive orders to speed up oil and gas projects, including the requirement for the Federal Railroad Administration to allow the shipment of LNG by rail.

“Not only do these executive orders benefit existing aspects of our business, but their implementation would further support our small-scale LNG efforts,” said the company.

“Specifically, we have equipment immediately available for this application which would be sold under our trade-marked ‘Gas By Rail’ brand,” it added.

In the Distribution & Storage Western Hemisphere division orders amounted to $114.1M, down 12.6 percent versus the prior-year quarter, which was the highest order quarter in the history of the D&S West business.

Chart also completed long-term agreements with two of its key trucking customers and said sales for LNG fueling systems for trucking continue to increase, with sales of $17.7M posted during the first quarter, up 68 percent from the first quarter of 2018.

Chart reported continued strength in LNG systems, trailers and packaged gas in the D&S East markets.

“With the regulatory suspension of tolls for natural gas trucks in 2019 and 2020 in Germany, there is visible strong interest in our quoting pipeline throughout Europe,” said Chart.

“Specifically, we received our first order for the first LNG fueling station from a customer in Germany at the beginning of April, and there are 16 additional stations planned in Germany between now and the end of 2020,” it added.

Air Products posts steady earnings in expanding market of industrial gas and LNG ventures

LNG Journal editor

Air Products, the leading US liquefied natural gas equipment-maker and industrial gases company, reported an increase in income from operations at it pursued its role in LNG worldwide and in industrial gases projects in Saudi Arabia and China.

The Lehigh Valley, Pennsylvania-based company, said fiscal second-quarter profits amounted to $421 million compared with $416.4M in the same three months a year ago, a rise of just over 1 percent.

CEO Ghasemi is pursuing strategic and high-return projects

Solid sales

Fiscal second-quarter sales came in at $2.2 billion an increase of 1 percent over the prior year.

Among its most recent LNG contracts, Air Products was chosen in February 2019 to provide its technology and equipment and a related process licence for the Golden Pass export plant being developed in Texas by Qatar Petroleum and ExxonMobil.

The equipment includes the main cryogenic heat exchangers to be installed at the heart of the proprietary propane pre-cooled mixed refrigerant liquefaction process for the three-Train facility.

"This strong performance was roughly offset by a 4 percent unfavorable currency move and 2 percent from a contract modification to a tolling agreement in India, which impacted sales but not profits," said Air Products in its earnings statement.

"Excluding the Jazan (Saudi Arabia) project, volumes grew 5 percent due to positive base business volumes and additional new plant on streams, including the Lu'An gasification facility in China," said Air Products.

"Pricing improved in all three regions and across merchant product lines," stated the US company.

Air Products reported gross earnings of $825 million, an increase of 12 percent over the same three months of 2018.

"The committed and motivated team at Air Products continues to generate superior performance, delivering our 20th consecutive quarter of adjusted earnings-per-share growth despite unfavourable currency," said Seifi Ghasemi, Chairman, President and Chief Executive.

"We have a differentiated position of financial strength and technology that enables us to continue deploying capital into strategic, high-return, value-creating projects while also continuing to return cash to shareholders through our dividend," stated Ghasemi.

In its industrial gases divisions, the Americas sales amounted to $992 million, an increase of 9 percent on the same quarter of 2018.

Europe and Middle east sales came in at $494M, a drop of 12 percent from 2018 quarter.

Air Products reported sales of $625M, a rise of 12 percent over the prior year.

Volumes increased 12 percent, driven primarily by new projects including the Chinese Lu'An industrial gases venture.

"We are forging a new path for growth through successful execution of world-scale projects," said Ghasemi.

"As a result, we remain confident that we will continue to deliver on our commitments," he added.

ExxonMobil to supply Zhejiang Energy with hub cargoes

US major ExxonMobil has signed a sales and purchase agreement with Zhejiang Provincial Energy Group to provide liquefied natural gas supplies over a period of 20 years.

Under the agreement, Zhejiang Energy is expected to receive 1 million tonnes per annum at its regasification facilities in China.

"This sales and purchase agreement represents an important milestone and provides a solid foundation for our strategic partnership with Zhejiang Energy," said Peter Clarke, senior vice president of LNG at ExxonMobil.

"ExxonMobil shares Zhejiang Energy's vision in developing a major LNG gateway in the Ningbo-Zhoushan region," added Clarke

The US company, whose headquarters are in Irving, Texas, is a global exploration and production partner of Qatar Petroleum whose Qatargas subsidiary is one of the world's largest LNG producers at Ras Laffan.

"We look forward to continuing our support for Zhejiang Energy during the construction, commissioning and operation of its Wenzhou LNG receiving terminal," stated the ExxonMobil executive.

China is now the second-largest LNG importer and in 2018 saw shipments jump by 38 percent to 53.81MT compared with just over 39MT in 2017.

China is also in the midst of increasing regasification and storage capacity at existing terminals as well as constructing new facilities.

Zhejiang Energy, in partnership with China Petroleum & Chemical Corp., is developing its Wenzhou gas hub to boost supplies in the eastern Chinese provinces.

Bangladesh awaits start of second FSRU deployed in Bay of Bengal

LNG Journal editor

Bangladesh is set to start-up its second liquefied natural gas import facility with the deployment offshore the port of Cox's Bazar of the floating storage and regasification vessel "Summit LNG".

The second FSRU for the Asian nation is part of a project involving Singapore-based Summit Power International and Excelerate Energy of the US, owner and operator of the FSRU and also the provider of Bangladesh's first floating import facility.

The 'Summit LNG' vessel was refitted at dry dock in Qatar

Cargo

The "Summit LNG" vessel is capable of regasifying 500 million cubic feet a day and has been charted from Excelerate for a period of 15 years.

The ship loaded its commissioning cargo at Ras Laffan in Qatar before heading for Bangladesh.

The Summit Group said the FSRU can handle around 3.75 million tonnes per annum of LNG and doubles the country's import capacity after a first FSRU, the "Excellence", was commissioned at Moheshkhali Island in August 2018 as the first Bangladesh import facility.

The Moheshkhali Island venture was co-developed by national energy company PetroBangla, the International Finance Corporation, part of World Bank Group, and Excelerate provided the FSRU.

The latest FSRU is a 138,000 cubic metres capacity vessel that was refitted at dry dock by the Nakilat-Keppel Offshore & Marine shipyard in Ras Laffan in Qatar for the Summit Group, whose Chairman is Muhammed Aziz Khan.

Summit operates 20 power plants in Bangladesh with an installed capacity of 1,941 megawatts comprising 20 percent of Bangladesh's total capacity in the private sector.

The power company is also developing the 583 MW gas-fired plant in the Bangladesh town of Meghnaghat, located about 20km south of the capital Dhaka and which will be the nation's largest when it comes on line in March 2022.

Japanese imports drop for fifth month amid coal competition

Japanese liquefied natural gas imports have gone into reverse as shipments dropped for a fifth straight month amid competition from thermal coal and nuclear and with Australian and spot cargoes replacing deliveries from the Middle East and Asia.

Cargoes delivered to Japan in March 2019 amounted to 7.29 million tonnes compared with 7.93MT in February 2018, a fall of 8.1 percent versus March 2018.

Japan's February deliveries had plunged by 11.4 percent and the last time Japanese imports rose was in October 2018 when 6.53MT was received, a 6.5 rise on the previous October. Even during the peak winter months from November 2018 through January 2019, imports dropped

Nine of Japan's nuclear power plants, which numbered 54 on line before the Fukushima disaster in 2011, have re-started to reduce LNG needs.

Thermal coal imports were preferred over LNG in March as 9.58MT was imported, an increase on February, though down 3 percent on March 2018.

The cost of the March 2019 cargoes came to 445.29 billion yen ($3.97Bln), a rise of 7.5 percent from the 414.35Bln yen ($3.70Bln) the cargoes cost in the same month a year ago.

For balance of payments purposes, Japan has been trying for a number of years to bring LNG import costs under control.

The Ministry of Finance data for March showed that Asian LNG shipments from nations such as Malaysia and Indonesia, Papua New Guinea and Brunei dropped 20.7 percent year-on-year to 1.73MT.

Imports from the Middle East region fell 26.7 percent versus 2018, with shipments from countries like Qatar, the United Arab Emirates and Oman totalling 1.32MT in March.

US shipments amounted to 198,000 tonnes, down on the 335,000 tonnes received in February.

Monthly Russian shipments from the Sakhalin Island plant in the Far East dropped 19.8 percent in March to 524,000 tonnes.

The balance of imports from other Australia, African nations and the spot market amounted to 3.51MT, a jump of 24 percent compared with the 2.83MT received in February 2019. The volume of cargoes was also up 11.6 percent year-on-year versus the 3.14MT logged in March 2018.

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China National Petroleum Corp. unit joins Yamal LNG players as partner in new Arctic LNG II joint venture

LNG Journal editor

Novatek, the Russian operator of the Yamal LNG plant in Siberia, said a subsidiary of the Yamal LNG stakeholder, China National Petroleum Corp., has decided to become a shareholder in Novatek's second liquefaction joint venture, Arctic LNG II.

The CNPC subsidiary that will hold the Arctic LNG II project shares is called China National Oil and Gas Exploration and Development Co. (CNODC).

Leonid Mikhelson, Chairman of Novatek (right), is backed by Russian President Vladimir Putin in pursuing his projects

Continuation

The binding agreement was signed in Beijing in front of Leonid Mikhelson, Chairman of Novatek, and Wang Yilin, Chairman of CNPC, and gives CNODC a 10 percent stake in the venture.

"The agreement is a continuation of our successful cooperation with CNPC," said Mikhelson.

"We successfully launched the Yamal LNG project on budget and ahead of initial schedule as partners, which is a unique achievement in the global gas industry," he added.

"The accumulated experience of working together is a solid basis for the successful implementation of our new LNG project," stated the Novatek Chairman.

Feed-gas for Arctic II will come from the Utrenneye natural gas field where reserves are estimated at 1,138 billion cubic metres.

Novatek is making fast progress with its second project by signing equipment and engineering contracts for the liquefaction plant that will be sited in Russia's Gydan Peninsula.

Contracts have been signed with turbo-machinery provider Siemens of Germany and the oil and gas engineering firm, Saipem of Italy.

The Arctic II project's final investment decision is expected to be taken in the second half of 2019, with plans to start up the first liquefaction Train in 2023.

The venture will have three Trains, each with a capacity to produce around 6.6 million tonnes per annum.

The Trains will be installed on Gravity Based Structures made of concrete and including LNG storage facilities totaling 687,000 cubic metres capacity.

Another Arctic II shareholder is French energy major Total, also a partner in Yamal LNG.

Total has acquisition a direct 10 percent stake in the venture. Total already owns a 19.4 percent stake in the Novatek company so its 10 percent direct stake gives it 21.6 percent of the Arctic II project.

Chinese LNG imports jump by 25 percent in March versus 2018 as more storage also becomes operational

Chinese liquefied natural gas imports rose 25 percent in March compared with the same month a year ago and the nation has also begun to improve its natural gas storage facilities to help meet peak demand.

The LNG imports amounted to 4.06 million tonnes in March compared with 3.25MT in March 2018, according to data from the General Administration of Customs.

However, the statistics showed that the level of shipments were down from the 4.35MT imported in February 2019 and much lower than the 6.58MT received in January at the height of the Northern Hemisphere winter season.

For the January-March period, China imported a total of 14.95MT of LNG, 20.7 percent higher than in the first three months of 2018.

Among the main suppliers of shipments to China in March 2019 were nations such as Qatar, Australia, Indonesia and Nigeria.

China's National Development and Reform Commission has been working to encourage companies to expand the gas pipeline network, improve gas storage and is now seeing results in enabling the system to meet peak demand when required.

China generally uses depleted or abandoned gas fields and reservoirs to build underground storage as they are more effective and economical compared with spherical tanks above ground.

The state-owned major, China Petroleum & Chemical Corp., also known as Sinopec, has now started sending natural gas imported at its Tianjin LNG terminal east of Beijing, to the newly-built Wen 23 underground gas storage facility at Puyang in northern Henan province.

The Wen gas storage was part of the China's 13th Five-Year Plan to benefit Hebei and Henan provinces and was rebuilt from an exhausted gas field and put into operation in mid-March 2019.

Sinopec said that the storage is connected to its own Ordos-Anping-Cangzhou gas pipeline, which is 700 kilometres long and includes one trunk line and two branch lines linking eight cities and 23 counties. The pipeline has been in commercial operation since November 2018

The gas storage is also linked to Sinopec's Yulin-Jinan and Puyang-Kaifeng gas pipelines in northern China. The Wen storage facility has capacity of 10.4 billion cubic metres and it is now the largest in the northern and eastern regions.

The underground storage gives Sinopec's gas supply optionality and flexibility during peak demand in northeast China.

The Wen project is the first of several major underground gas storage facilities scheduled to start up in the next couple of years to meet growing Chinese demand.

Sinopec's onshore Tianjin LNG terminal, which started commercial operations in April 2018, has an annual transfer capacity of 3MT.