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LNG JOURNAL PUBLICATION

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LNG expansion project deal signed by Nigeria and engineering firms

Financing is being arranged and initial engineering started after 11 years of delays
LNG Journal editor

Nigeria LNG, the company that runs the West African nation's six liquefaction Trains at Bonny Island on the Niger delta, has taken the first steps towards constructing a seventh Train after years of delay by awarding engineering contracts and planning to raise \$7 billion from the global financial markets.

"Our vision is to be a global player that helps to build a better Nigeria," said Nigeria LNG Chief Executive Tony Attah in launching the financing exercise and the front-end engineering and design package.

London event

The front-end engineering and design contracts were awarded on a contest basis to two consortiums at an event in London.

The first comprises Italy's Saipem, Chiyoda Corp. of Japan and Daewoo Engineering of South Korea and the second groups KBR of the US with the Franco-US firm TechnipFMC and JGC Corp. of Japan.

"We are looking forward to the growth and when I am talking about growth I am talking about Train 7," stated Attah.

"We have the support we need, we have the support from the shareholders, from the government from the board of directors," he added.

NLNG runs an integrated plant on Bonny Island where its current six LNG Trains produced 20.34 million tonnes per annum last year, making Nigeria the world's fourth-largest producer behind, Qatar,



Nigeria LNG CEO Tony Attah (centre) flanked by executive representatives of the two engineering consortiums, Saipem's Guido D'Aloisio (left) and KBR's Farhan Mujib

Australia and Malaysia. The Nigerian plant shares common facilities including storage tanks, shipping capacity and loading jet-ties with a gas intake of 3.5 billion standard cubic feet of natural gas per day.

The company has also converted over five trillion cubic feet of associated gas from oil production, which otherwise would have been flared as greenhouse-gas to produce LNG at the NLNG plant.

The West African nation has produced LNG since 1999 and the main shareholders in the Trains are Royal Dutch Shell, French major Total and Eni of Italy.

NLNG will aim to debottleneck its six existing Trains and construct a seventh Train with associated infrastructure.

The company has now repaid the total loan amount of \$5.45Bn need to build Trains one to six, plus interest.

The Train 7 project was last moving forward in 2007 when pre-FEED studies were made to add to the six Trains built from the late 1990s by a joint venture comprising KBR, JGC and the predecessor companies of TechnipFMC and Saipem.

The Nigerian company said that a final investment decision would be taken around the fourth quarter of 2018 to advance with the construction phase.

Nigeria said it regarded the Train 7 project was "the gas revolution" in Nigeria after the expansion had been stalled for many years under previous administrations.

"Nigeria needs to invest in new production to avoid slipping from the 4th to 10th position in the league of LNG producers," explained CEO Attah.

Crucial

"The front-end engineering and design is the most crucial part in the build-up to the actualisation of Train 7, after some delay and lost opportunities to reinforce Nigeria's position prominently on the global energy map," said the CEO.

"Typically, FEED takes about 9-12 months but we have explored another strategy for this project by adopting the dual FEED process which awards this crucial part of the Train 7 project to two prospective engineering consortia, instead of one contractor.

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NextDecade's Galveston Bay project given permit to export from three large Trains for 20 years

LNG Journal editor

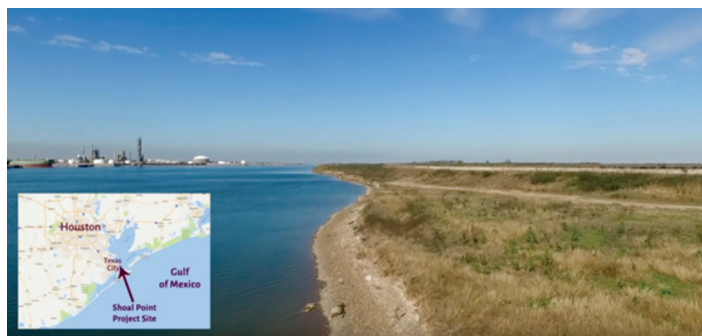
Galveston Bay LNG, a project planned by Houston-based company NextDecade, has been authorized by the US Department of Energy to export up to 785.5 billion cubic feet per annum, the equivalent of 16.5 million tonnes of LNG, from its proposed liquefaction facility in Texas City.

The Galveston Bay venture has received a DOE permit to ship cargoes for 20 years to nations both with and without a Free Trade Agreement with the US.

Second plant

NextDecade is additionally developing the Rio Grande liquefaction and export plant to be located on the northern shore of the Brownsville Ship Channel in Texas.

The Nasdaq-listed company has a portfolio of projects that also includes the Rio Bravo Pipeline that would have 4.5 billion cubic feet of capacity to supply the Rio Grande liquefaction plant with



Galveston Bay plant to be on eastern side of Texas City

feed-gas from the Agua Dulce area hub.

NextDecade told the DOE that the Galveston Bay plant would be located on the eastern side of Texas City within the city's industrial complex, adjacent to the Port of Texas City and near the Port of Houston and the Port of Galveston.

The facilities will be designed to include three liquefaction Trains each with capacity to produce 5.5 million tonnes per annum and four LNG storage tanks, each with a capacity of around 200,000 cubic metres.

The Galveston Bay plant would receive its feed-gas through a proposed 85-mile pipeline to be developed by a company affiliate.

NextDecade told the DOE that the pipeline would run from the Katy Gas Market Hub and its capacity is expected to about 3 Bcf per day, providing "a modest amount of firm service to third parties".

"The exact capacity will depend on prevailing conditions, including the level of third party interest in making long-term commitments for firm transportation,

physical constraints, economics and environmental considerations," it added.

The export plant will be sited on a part of Galveston Bay known as Shoal Point, with the northern and western perimeters of the site located adjacent to the Texas City Ship Channel.

Galveston Bay LNG will occupy almost 1,000 acres of land and NextDecade has entered into an initial three-year lease for the site from two landholders who are the Texas General Land Office and the municipal authorities of Texas City.

"These two landholders own parcels of land that collectively form the entire project site," the company told the DOE.

"The short-term leases provide that the Texas General Land Office and Texas City will each negotiate a long-term agreement with NextDecade for the purpose of constructing and operating an LNG export facility," it added.

Nymex and global platforms owner CME to develop futures contract for US Sabine Pass export plant

CME Group, the US energy and commodities derivatives market leader comprising the York Mercantile Exchange and related platforms, has reached an agreement with Cheniere Energy to develop an LNG futures contract based on physical delivery to Cheniere's Sabine Pass liquefaction and export plant on the Gulf Coast of Louisiana.

The CME-Cheniere will enable producers, buyers and traders to hedge specific LNG deals and market activities in addition to using the US benchmark Henry Hub natural gas price on the NYMEX.

"In recent years, the shale revolution has unlocked abundant supplies of natural gas here in the US, creating new risks and opportunities for producers, processors, consumers and traders," said

Peter Keavey, CME Group Global Head of Energy.

"Through its Sabine Pass liquefaction facility, Cheniere is delivering Henry Hub-indexed natural gas to the world in the form of LNG," added Keavey.

"This agreement with Cheniere is significant because it will be the foundation for developing a new LNG risk management tool for producers, consumers and traders around the globe, while further cementing the role of Henry Hub natural gas futures as the global gas pricing benchmark," explained Keavey.

The CME price for physical natural gas delivered to Sabine Pass will likely complement other LNG and natural gas derivative products offered by US pricing agencies such as Platts and by the

trading platforms in Singapore, Tokyo and in Shanghai.

Cheniere currently exports around 18 million tonnes per annum of LNG from four Trains at the Sabine Pass plant that began commercial operations in February 2016.

A fifth Train is under construction and a sixth is fully permitted and ready to be constructed, which would bring total output to 27 MTPA.

Cheniere is also constructing a separate LNG export facility at Corpus Christi on the Gulf Coast of Texas.

"As US Gulf Coast LNG is increasingly exported to Asia, South America and Europe, there will be an increased need for producers, processors and end users to hedge their price risk," said CME.

The company's name comes from the Chicago Mercantile Exchange and its trading points also include global commodities and currency markets as well as energy.

"CME's robust suite of natural gas futures and options are already helping customers manage risk around this shift away from regional benchmarks to an increasingly interconnected global gas market," it stated.

"In addition to its deeply liquid and established global benchmark Henry Hub natural gas futures and options contracts, a physically deliverable LNG futures contract from CME is expected to help the industry manage price risk more effectively and efficiently," it added.

S. Korea and Singapore pledge closer LNG relations

South Korean President Moon Jae-in and Singaporean Prime Minister Lee Hsien Loong have held talks in the Asian city state and agreed to further strengthen economic cooperation in liquefied natural gas and energy as well as in other sectors.

South Korea is the world's third largest importer of LNG with six import terminals in operation.

Singapore has only one terminal but is developing an Asian regional LNG hub with cargo pricing, maritime fuel supply and LNG bunkering infrastructure.

The South Korean LNG activity is focused on also boosting its shipping industry as it revives after a global slump and it is taking the lead in offering vessels powered by LNG to meet new global restrictions on greenhouse-gas emissions and pollutants.

At the same time South Korea's shipyards are continuing to receive orders for new LNG carriers to deliver the fuel around the world, while Singapore's Keppel yard is known for LNG vessel maintenance and has been converting conventional carriers into LNG production hulls.

The Singapore meeting between the South Korean President and the Singaporean PM is part of a three-day state visit, the first of its kind by a South Korean leader to Singapore in 15 years.

"Sharing a view that the countries are the best partners for each other to spearhead the fourth industrial revolution, the two leaders agreed to strengthen the countries' exchanges and cooperation in the energy sector, such as smart grids and LNG," said a statement.

ExxonMobil and Eni present plan for Mozambican Rovuma LNG

LNG Journal editor

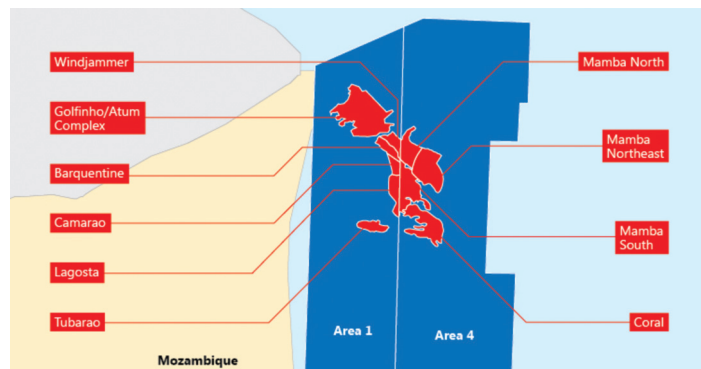
US major ExxonMobil and Italian energy company Eni have submitted their development plan envisaging an initial two production Trains for the first phase of the onshore Mozambique LNG export project using feed-gas from the Rovuma Basin Area 4 offshore licence.

The plan submitted to the Mozambican government in Maputo gives details of the proposed design and construction of two processing Trains which will each produce 7.6 million tonnes per annum for what will be called the Rovuma LNG Project.

Project leader

ExxonMobil said it would lead the construction and operation of the liquefaction plant to process the feed-gas from the Mamba gas fields.

The US company stated that as the Rovuma LNG project progressed, every effort would be made to actively build the local workforce and supplier capabilities in Mozambique.



Mozambique's main gas fields in the offshore Rovuma Basin that will provide feed-gas for onshore and floating plants

"We are excited to be progressing the Rovuma LNG project, working with the government and leveraging the expertise and capabilities of all of the partners," said Liam Mallon, president of ExxonMobil Development Company.

A final investment decision by the Area 4 joint venture parties is scheduled in 2019, with LNG production expected to commence in 2024.

"The Rovuma LNG Project is moving forward swiftly," said Stefano Maione, Eni's executive

vice-president for its Mozambique activities.

"The size of the project makes it not only an important investment in the country, but also supports economic growth and opens new opportunities for Mozambicans," added Maione.

ExxonMobil and Eni said that marketing activities were also progressing, with negotiations on sales and purchase agreements underway, targeting completion in parallel with the development plan approval process.

Japanese spot LNG hits \$9.30 per MMBtu mark on more competition

The surge in liquefied natural gas spot prices in the past year is shown in the latest Japanese government data, with contracted shipments valued at \$9.30 per million British thermal units compared with \$5.70 per MMBtu a year ago.

While contracted cargoes remained at a high price, the average price paid by Japanese buyers of spot shipments received at Japanese terminals in June was slightly lower at \$8.90 per MMBtu versus \$5.50 per MMBtu in the year-ago period.

Japanese spot LNG prices have been driven higher by more competition for cargoes in North Asia, particularly from China.

The North Sea Brent crude oil

price that influences Japanese long-term contract prices also impacts spot LNG and other energy markets.

The average price for cargoes delivered in May stood at \$7.90 per MMBtu versus \$5.70 per MMBtu in May 2017.

The price for contracted shipments in May was \$8.20 per MMBtu compared with \$5.70 per MMBtu in the same month of 2017, though was lower than the previous month.

The spot cargo numbers come from the commerce division of the Japanese Ministry of Economy, Trade and Industry and are only issued if a minimum number of two trades are recorded.

The Ministry emphasizes that

"spot LNG" refers to fuel traded on a cargo-to-cargo basis and does not mean shipments under contracts on a short-term, medium-term or long-term basis. The statistical accounting of the spot prices started in March 2014.

Overall Japanese LNG imports rebounded in May to rise by 2.7 percent as US shipments to Tokyo Bay started from Cove Point in Maryland, though thermal coal purchases were still preferred to LNG for power generation.

The May LNG imports of mostly long-term supplies amounted to 6.40 million tonnes compared with 6.23MT in May 2017, according to the preliminary trade figures from the Japanese Finance Ministry.

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NEWS NUDGES

Danske firm joins Equinor

Equinor, the Norwegian energy company and LNG producer, has acquired energy trading firm Danske Commodities, based in Aarhus in Denmark. The Danish gas and power trading firm has 284 employees. Equinor said that last year Danske Commodities traded 389 terawatt hours of natural gas across 18 countries, around one third of total Norwegian gas production. "Danske Commodities' trading platform and geographic footprint will support our strategy through leveraging DC's material trading position in electricity and natural gas," said Jens Okland, Equinor's Executive Vice President for Marketing, Midstream and Processing.

Ophir update on plans

Ophir Energy, a stakeholder in the stalled Fortuna floating LNG project offshore Equatorial Guinea in West Africa, is still looking for a new CEO after the departure of Nick Cooper in May from the UK company. "Our search for a new CEO is making good progress and a number of highly experienced and qualified external candidates have been identified," said Alan Booth, Interim CEO of Ophir. "The Board will of course provide further updates as and when appropriate," he added.

Flex LNG carrier

Flex LNG, the Oslo-listed operator of a growing fleet, said it completed a sale-leaseback transaction for the 1740,000 cubic metres capacity carrier, the "Flex Rainbow", after taking delivery of the vessel from the Samsung Heavy Industries shipyard in South Korea. "The 'Flex Rainbow' is the company's fourth LNG carrier on the water while four (other) carriers are currently under construction," said Flex.

Fifth Indian LNG import terminal to be sited on West Coast is set for September operational start-up

LNG Journal editor

The energy company owned by the Indian West Coast state of Gujarat that includes the city of Mumbai said it would bring its Mundra LNG import terminal on line by September 2018 while it awaits the signing up of a strategic partner.

Gujarat State Petroleum Corp. (GSPC) Managing Director Jagdip Narayan Singh said his company would commission the facility even as a proposed shareholder deal with Indian Oil Corp has still to be finalized.

Capacity

The Mundra terminal will be the third sited in Gujarat state and the fifth on the West Coast of India, while no facilities currently operate on the East Coast.

"We will commission Mundra terminal by the end of August or mid-September. It will operate at 1.5 million tonnes a year capacity for the first one-and-a-half years before scaling up to full capacity," said Singh, who is also the Chief Secretary of Gujarat state.

The terminal is located at Mundra Port, north of Mumbai, operated by the Adani Group. It has two storage tanks and expected capacity of 5 million tonnes per annum, while being able to accommodate the largest LNG carriers.

GSPL has constructed the terminal through a partnership with Adani and is still hopeful that Indian Oil will come on board as a third shareholder to add its expertise.

However, Indian Oil is occupied



Gujarat State Petroleum will commission Mundra facility

with its own East Coast project at Kamarajar Port near Chennai that is expected to be completed before the end of 2018.

Singh said GSPC had decided to commission the import terminal first and then look at a strategic partner.

"We have been in talks with IOC but as the partnership was delayed we have now decided to first commission the terminal and then see who we can get as a partner," added Singh.

India's four current operating LNG import terminals are at Hazira, Dahej and Dabhol near Mumbai and at Kochi in the southwest state of Kerala.

Dahej is the largest terminal with more than 15 MTPA of capacity and is owned and operated by Petronet LNG, while Hazira is the second largest and is operated by Shell India.

As regards East Coast terminals, there are about half-a-dozen terminal projects underway.

Indian Oil's Kamarajar Port LNG terminal in the southeast state of Tamil Nadu is scheduled to come online by year-end.

The terminal at Kamarajar Port, formerly one of India's main coal ports and previously called Ennore, would handle around 5 million tonnes per annum for Indian Oil, a state-backed refiner and fuel distribution company that is also a shareholder in Petronet LNG.

The Kamarajar LNG project is located about 25 kilometres from Chennai Port and initially the imports would supply natural gas to industry in the Manali area, including Madras Fertilizers Ltd., Chennai Petroleum Corp. and Tamil Nadu Petroproducts.

Gas Authority of India, one of the leading Indian LNG sector participants, has joined with Adani and Indian Oil to develop a second East Coast LNG terminal, the Dhamra project in the state of Odisha.

Among the other east Coast projects, the Krishna Godavari LNG terminal project, a subsidiary of US-based VGS, plans to deploy a 3.6 MTPA floating facility in Kakina in the state of Andhra Pradesh.



We have been in talks with IOC but as the partnership was delayed we have now decided to first commission the terminal and then see who we can get as a partner



- Jagdip Narayan Singh, Managing Director, Gujarat State Petroleum Corp.

Indonesia cancels Japanese-backed onshore LNG import terminal joint venture planned for West Java

LNG Journal editor

Pertamina, the Indonesia state energy company, said it would not be going ahead with on onshore LNG regasification terminal project backed by Japan and planned for Bojonegara in Western Java.

"We are not going ahead, because it is not yet feasible to continue," said Pertamina in a statement.

Demand

Analysts said Indonesia, itself an LNG producer, had expected natural gas demand to increase in the domestic market, though coal has continued to be more economic than gas while the country has been slow to develop the necessary pipeline infrastructure to cope with additional volumes.

Japanese utility Tokyo Gas and Pertamina had signed a provisional agreement in February 2015 to form a strategic alliance on LNG



The 'PGN FSRU Lampung' is a floating regas facility

imports for power and industry with an onshore terminal being the centrepiece near Jakarta.

Pertamina and Tokyo Gas have nurtured good relationships in the sale and purchase of LNG as the Indonesian company has been a long-standing supplier of shipments to Japan.

The Tokyo Gas engineering subsidiary was to have been the main builder of the facility with up to 5 million tonnes per annum of capacity. The shareholders included the Kalla Group and Pertamina with financing from the Japan Bank for International Cooperation.

"Gas demand has declined so it's not feasible from a business standpoint," added Pertamina.

The venture is separate from the venture being pursued by Pertamina and Japanese companies Marubeni Corp. and Sojitz Corp, to deploy a 170,000 cubic metres capacity floating storage and regasification unit for the Jawa gas-to-power project.

Indonesia still uses two FSRUs to supply surplus gas needs and the former liquefaction plant at Arun was transformed into a regas terminal in 2015 to supply the Aceh region of northwest Sumatra.

The nation last year remained the world's fifth-largest LNG exporter with three plants on stream and 18.70 million tonnes of output.

It has produced LNG at the huge Bontang facility since 1977 and also has the more recent Sulawesi LNG plant in operation since 2015 and involving Pertamina and Mitsubishi Corp. of Japan.

The third plant is the BP-operated Tangguh LNG in the province of West Papua that is currently adding a third liquefaction Train to bring total plant capacity to 11.4 MTPA by 2020.

“ Pertamina and Tokyo Gas have nurtured good relationships in the sale and purchase of LNG as the Indonesian company has been a long-standing supplier of shipments to Japan. ”

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Two Japanese shipping lines advance on LNG bulker

Nippon Kaiji Kyokai, the Japanese maritime classification society known as ClassNK, has approved the concept and design of an LNG-powered large Capesize bulk carrier put forward by Japanese shipping companies NYK Line and Japan Marine United.

ClassNK said the Approval in Principle for the 200K DWT bulk carrier was based on its Rule Part GF, which adopts the IGF Code regulation for ships using low-flashpoint fuels.

The class society said that JMU led the design process for the bulk carrier and explained the background to the project.

"Despite its added weight due to the increased amount of equipment such as its LNG fuel tank and LNG fuel supply system, it provides more cargo hold capacity," said ClassNK.

"By running on LNG, this vessel is expected to satisfy Phase 3 of the Energy Efficient Design Index defined by the International Maritime Organization (IMO) for ship greenhouse-gas emissions," it added.

Hayato Suga, ClassNK's Director of Technical Solutions, said the design developed by NYK and JMU meets the industry's demand for an increase in cargo capacity while also being environmentally friendly.

"As a classification society, we have confirmed the safety of the design and are very happy to be involved with this innovative project," added Suga.

ClassNK also recently released its guidelines for LNG carrier structures and independent prismatic tanks, specifying the technical requirements related to the structural strength assessments by using direct calculation.

Sembcorp Marine of Singapore raises price for Oslo-listed Sevan

LNG Journal editor

Sembcorp Marine of Singapore has raised its purchase price for the acquisition of the intellectual property rights of Oslo-listed Sevan Marine to US\$39 million from US\$28 million and including the Sevan subsidiary HiLoad LNG.

The price increase was decided after further negotiations with several of Sevan Marine shareholders, said Sembcorp in a filing with the Singapore stock exchange.

Subsidiary

The Singapore company said in June its subsidiary, Sembcorp Marine Integrated Yard, was entering into a sale and purchase agreement with Sevan Marine to acquire its interests and title to all its intellectual property, including a 95 percent stake in HiLoad LNG AS, the Sevan Marine subsidiary holding the design rights.

When the transaction is completed Sevan Marine has said it would terminate a legal dispute with Sembcorp Marine and Jurong Shipyard filed in the US state of



Sevan to work with Sembcorp Marine Integrated Yard

Texas. Sevan Marine is a specialized engineering and design house and its cylindrical hull is a proven alternative to traditional offshore, floating designs.

The Norwegian company also has a floating regasification dock design in its portfolio along with HiLoad LNG.

The Sembcorp-Sevan transaction also includes all operating and associated costs in maintaining Sevan Marine's three office locations in Norway.

Sembcorp had said that through the acquisition it would be better placed to design and engineer solu-

tions for the global offshore and marine sectors. Sembcorp plans to fund the revised amount for the acquisition through a combination of internal funds and bank financing.

"Sevan Marine has scheduled an extraordinary general meeting on 6 July 2018 to obtain approval for the proposed transaction," said Sembcorp.

"As part of the revision of the purchase price, Sevan Marine will not have a right to terminate the proposed transaction in respect of any alternative offer," added the Singapore company.

Vietnam makes progress on its own gas output as it awaits LNG

PetroVietnam executives have held talks with Russian natural gas company Gazprom to discuss limited Vietnamese offshore gas production and the progress of liquefied natural gas projects in the Southeast Asian nation that is still without LNG imports or infrastructure.

The PetroVietnam's Gas subsidiary is developing the Thi Vai LNG import terminal in the southern province of Ba Ria Vung Tau.

Commercial operations are expected around 2020 with an initial 1 million tonnes per annum of shipments.

PetroVietnam is also developing a second LNG terminal venture, the Son My facility in the central province of Binh Thuan.

The Son My terminal would

have a capacity of up to 3 MTPA of LNG and could start operating between 2023 and 2025.

In the meantime Vietnam has been engaged in the development of two offshore natural gas fields in joint ventures with Gazprom.

The Gazprom-PetroVietnam operations began in 2013 and commercial gas and condensate production have started at the Moc Tinh and Hai Thach fields offshore southern Vietnam.

The fields are located in the Nam Con Son basin in water depths of about 140 metres.

Development is based on two production platforms, an integrated gas treatment platform, a floating storage terminal for liquid hydrocarbons and a subsea

pipeline. Construction of most of the production wells was completed in 2017. The combined reserves of the two Vietnamese fields are estimated at 55.6 billion cubic metres of gas and 25 million tonnes of gas condensate.

"The Moc Tinh and Hai Thach fields were expected to produce 2 billion cubic metres of gas (target level) in 2018," said a statement from the Moscow talks.

The meetings with Gazprom involved Chairman Alexei Miller and his PetroVietnam counterpart Tran Sy Thanh. It was noted that both companies in 2015 had set up a joint called PV-Gazprom to focus on providing natural gas for vehicles.

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Inpex now sees first Australian LNG project cargo by early October and new delay may hit earnings

LNG Journal editor

Japanese energy company Inpex Corp. has acknowledged another delay in the export of the first cargo from the Australian Ichthys LNG export plant near Darwin, now envisaged for October after delays caused by electrical faults on an offshore platform.

"The project carried out an inspection mainly on electrical equipment during the process of final safety verifications in cooperation with Australian regulators and in preparation for the start-up of production," said Inpex.

Verifications

"Following additional verifications concerning the electrical equipment, the project is scheduled to commence production, and will thereafter begin the shipment of products towards the end of the first half of the current fiscal year," added Inpex, which would be the month of October.

Inpex said the further delay on the LNG venture was likely to have an impact on its earnings forecasts.

An Australian regulatory body said some safety problems had been found on the offshore natural gas platform deployed offshore northwest Australia as part of Inpex's venture with French en-



Ichthys project's Bladin Point liquefaction plant near Darwin

ergy major Total. The National Offshore Petroleum Safety and Environmental Management Authority (Nopsema) said it found "deficiencies" in the suitability of electrical equipment in hazardous areas during a four-day inspection of the Central Processing Facility, the "Ichthys Explorer", from June 25 to 28.

"The impact of this matter on the consolidated financial results forecasts for the year ending March 2019 is currently being evaluated, taking into account the oil price outlook and other factors, and will be announced immediately if forecasts are revised," stated Inpex.

Inpex had already completed the necessary commissioning of all key onshore and offshore facilities for the production start-up.

"While the Project's activity schedule going forward may fluctuate depending on weather conditions at the worksites, preparation activities and other factors, Inpex will continue to work towards the success of the project," it said.

The Australian regulator said its inspectors had found unsuitable electrical equipment installed in hazardous areas of the CPF, which was constructed by Samsung Heavy Industries in South Korea.

The regulator added that the inspectors had not yet formally concluded their findings and were considering taking enforcement action.

Nopsema stated that its latest findings were similar to others explained in a notice sent to Inpex in August 2017.

Inpex said the project had already completed commissioning of the offshore production portion

required for the start-up and the 890 kilometres-long gas pipeline was operating.

The pipeline will take the feed-gas to the liquefaction plant constructed at Bladin Point, near Darwin.

The late arrival of the offshore platforms was one of several factors, including labour disputes, that had delayed by more than 18 months the commercial start of the US\$37 billion venture for Inpex and Total.

The plant will produce 8.9 million tonnes per annum from two processing Trains and cargoes will be shipped to Asia.

The Japanese company has had a new Chief Executive and President since June 26 in Takayuki Ueda, aged 61.

Ueda replaced incumbent CEO Toshiaki Kitamurato who is now in the post of Chairman.

Ueda had joined Inpex in April 2017 as an Executive Vice President after various roles at Japan's Ministry of the Economy, Trade and Industry.

Inpex said that for the onshore phase of commissioning, the onshore and offshore pipelines were ready and the hydrostatic testing of all product storage tanks has been completed.

Baltic Exchange in London begins trials for LNG Index on Australian Gladstone Port-to-Tokyo route

The Baltic Exchange in London, one of UK's oldest financial institutions and now part of the Singapore Exchange (SGX) group, has launched trials of its new liquefied natural gas freight index that will eventually comprise several routes for the evolving LNG shipping market.

The Baltic Exchange, whose motto is "our word, our bond", is a European leader in the multi-billion-dollar freight derivatives market.

It first made its move towards

the LNG market in January 2018 following an approach by leading Baltic Exchange LNG shipbroking companies.

The LNG index trials follow the forming of a panel to help develop a price marker comprising several routes. The Exchange said the reporting of the new benchmark vessel index started on 10 July.

The benchmark route is from the port of Gladstone in Queensland, eastern Australia where three LNG export plants are

located, to Tokyo with a round-trip voyage on 1.25 percent commission.

The price assessment of the route by a vessel of 160,000 cubic metres capacity will be calculated in US dollars per day on a weekly basis and published every Tuesday on the Baltic Exchange website.

The Exchange was founded in 1744 as a forum for chartering vessels and now mainly produces benchmark indexes for global shipping rates while operating its trad-

ing platform for the freight derivatives market.

It was taken over by the Singapore Exchange in September 2016 and since then has been seeking to expand its business into LNG and is also publishing a new global container freight index.

The initial launch of the LNG index followed recommendations by a number of broking companies, including Affinity, Braemar ACM and Clarksons.