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LNG JOURNAL PUBLICATION

4 December 2018

Russian Yamal LNG at full capacity needs more West trans-shipments

Novatek Chairman Leonid Mikhelson said third liquefaction Train is year ahead of schedule
LNG Journal editor

The owners of the Yamal LNG plant in the Arctic region of Russia are ramping up its cargo deliveries to Asia and the European trans-shipment market as the three-Train facility is now fully on stream.

Russian natural gas company Novatek and its main partner in Yamal LNG, French energy major Total, are now proceeding with delivering more cargoes to West European import terminals for trans-shipments, in addition to using ship-to-ship transfers off Norway.

Third Train

The third liquefaction Train at the Russian plant is on stream, taking overall capacity to 16.5 million tonnes per annum.

Novatek has managed to ramp up production at a fast pace after beginning commercial services on the first Train less than a year ago.

The second Train at the US\$27-billion facility had come on stream in July 2018. Novatek is being helped in its marketing efforts by Total, which holds a 19 percent stake in Novatek itself as well as the Yamal plant.

"We have successfully launched all three LNG trains at our flagship Yamal LNG project according to our revised early launch schedule," said Novatek Chairman Leonid Mikhelson.

The Novatek-Total partnership in the Yamal joint venture had suffered in the early days of construction from Western economic sanctions over the Ukraine crisis and this led to Chinese National



Russian ship-to-ship transfer offshore Norway

Petroleum Corp. and the Chinese Silk Road Fund being brought in as shareholders and with an almost 30 percent stake.

"We have not only launched all three technological trains on budget, but have launched the third LNG Train more than one year ahead of the planned original schedule," said Novatek Chairman Mikhelson.

"We have transformed Novatek into a global gas player and obtained the unique experience of design and construction of Arctic LNG projects," he added.

Novatek also confirmed that the venture was building a fourth small-scale production Train with 1 MTPA of output.

"The innovative fourth LNG train at Yamal LNG will be based on Novatek's proprietary liquefaction technology called 'Arctic Cascade' and will utilize Russian-manufactured equipment," he stated.

Novatek said the next aim for the company was to reach a final investment decision in 2020 for its new LNG project, Arctic LNG II, with capacity of almost 20 MTPA.

Financing is expected to come from the current partners and from other potential investors in the Middle East, China and Japan.

Novatek's logistical network has also been joined by Norwegian

shipping company, Tschudi, which will be instrumental in the trans-shipment of cargoes off the northern coast of Norway.

Yamal's LNG output has been constrained by the number of Arc7 LNG tankers available to deliver cargoes as some are still being built.

The seven Arc7 tankers in operation have been carrying LNG cargoes to the Netherlands, Belgium and France for unloading at terminals and for later re-loading to conventional carriers for onward journeys to customers in Asia.

In order to optimize the use of the Arc7 LNG carrier fleet, Novatek needs to transfer LNG onto conventional carriers once vessels are clear of the ice-covered waters of the Northern Sea Route.

For this purpose Tschudi, a privately-held Norwegian shipping, logistical and ship management company has secured permission from the Norwegian authorities to conduct scores of transfers in the next six months off the port of Honningsvåg.

The first such operation occurred on November 22 when the Arc7 LNG carrier "Vladimir Rusanov" transferred up to 173,000 cubic metres of LNG to the lower level ice-class carrier "Pskov".

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German oil and gas major Wintershall buys into huge Abu Dhabi gas project ahead of merger

LNG Journal editor

Wintershall, the German oil and gas major, has purchased a 10 per cent stake in the Ghasha natural gas mega-project in Abu Dhabi in the United Arab Emirates, boosting the future merger between Wintershall and Deutsche Erdoel AG (DEA) set for 2019.

Abu Dhabi National Oil Company (Adnoc), which also produces LNG at the Das Island plant in the Gulf and is extending output until 2040, said that in return for its stake Wintershall would contribute 10 per cent of the project capital and operational development expenses.

Terms

The value of the Adnoc-Wintershall transaction has not been disclosed.

The Ghasha sour gas project is expected to produce more than 1.5 billion cubic feet of gas per day.

The Ghasha concession the Germans are buying into also includes the Hail and Dalma offshore sour gas fields.

"Germany's largest crude oil and natural gas producer joins Italy's Eni as a partner with Adnoc in the project," said Adnoc.

Eni was awarded a 25 per cent



Wintershall CEO Mario Mehren and Adnoc counterpart Ahmed Al Jaber after signing of stake agreement

stake in the Ghasha concession earlier in November.

"The agreement marks the first time a German oil and gas company has been awarded a stake in an Abu Dhabi concession area and underscores Adnoc's objective to expand and diversify its strategic partnership base," said the UAE company.

The concession agreement, which has a term of 40 years, was signed by Ahmed Al Jaber, UAE Minister of State and Adnoc Chief Executive, and Mario Mehren, CEO of Wintershall.

"This builds on Adnoc's new integrated gas strategy, targeted to unlock and maximize value from Abu Dhabi's substantial, available gas reserves, as the UAE moves towards gas self-sufficiency and aims to transition from a net importer of gas to a net gas exporter," stated Adnoc.

"Wintershall has extensive experience of appraising and developing ultra-sour gas resources in technically complex fields," explained the UAE company.

"It is a partnership in which each company will benefit from the experience of the other as, together, we optimize costs and ensure we extract the maximum value from all the available gas resources," it added.

The Ghasha ultra-sour concession will tap into the Arab basin, which is estimated to hold multiple trillions of standard cubic feet of recoverable gas.

Wintershall CEO Mehren said he was delighted to be a partner in this project, supporting Adnoc's growth strategy.

"The project also fits excellently with our strategy. We have been working since 2010 on

strengthening the Middle East region by investing here and developing it into another growth region for Wintershall, added Mehren.

"Wintershall is particularly qualified for the offshore operations in the Ghasha concession. We are experts in drilling technically demanding wells and developing fields efficiently. And we know precisely what counts in ecologically sensitive areas," explained Mehren.

Mehren will also head the combined Wintershall DEA combination that will be the merger of Wintershall, currently owned by German chemicals and energy group BASF, and DEA, a subsidiary of LetterOne, the investment vehicle of Russian billionaire Mikhail Fridman.

The merger is expected to be completed early in 2019 and the company would operate under the name Wintershall DEA.

Analysts said the merger gives Germany a higher profile energy company in a sector where it has lagged behind other nations, given the dominant size of its economy in the European Union.

Until 2019 closing of the transaction, Wintershall and DEA are continuing to operate as independent companies.

German-backed Nova Scotia LNG developer Pieridae Energy posts losses and awaits takeover approval

Pieridae Energy, the Canadian exploration and production company and developer of the Goldboro LNG export project in Nova Scotia with German-backed funding and sales accords, reported a net loss in its latest earnings as it awaited the completion of an acquisition.

Pieridae posted a widening third-quarter net loss of C\$20.36 million (US\$15.43M) compared with the same three months of 2017 when losses were C\$2.13M.

Nine-month losses at the end of the third quarter were C\$26.02M versus C\$5.76M in the same period

of 2017. The Calgary-based company, headed by Chief Executive Alfred Sorensen, is listed on the Toronto Stock Exchange list for small commodities companies.

Pieridae also gave an update on its efforts to complete the acquisition of Ikkuma Resources, a small energy firm with assets in the province of Alberta.

Prior to the agreement to acquire Ikkuma, Pieridae took over resources in the Canadian province of New Brunswick when it completed a merger with Petrolia Inc.

Pieridae said that on November

13 Ikkuma received notice to move forward with obtaining the approval of shareholders for the deal.

A meeting of Ikkuma shareholders has been scheduled for December 17.

The Goldboro LNG export project has been given the final go-ahead by the Nova Scotia Utility and Review Board after previously receiving its environmental approval.

The final investment decision for the LNG venture is now expected by June 2019.

German utility Uniper is one of

the Goldboro project's customers and Pieridae has also received a written confirmation of eligibility in principle for up to US\$1.5 billion of untied loan guarantees from the German federal government.

Pieridae proposes to produce 10 million tonnes per annum of LNG at the planned Nova Scotia plant.

The company has signed a 20-year supply agreement with Uniper for 5 MTPA of its production and has additionally embarked on a strategy of securing natural gas reserves for liquefaction.

Taiwan gets first Ichthys cargo and boosts supply

CNP Corp., the Taiwanese energy company, said it received its first cargo on November 26 from the Ichthys LNG export plant in the Northern Territory of Australia, as the Asian country claimed as part of China broadens its supply sources.

Taiwan, known by China and in international organizations as “Chinese Taipei”, was the third-largest Asian importer of LNG until 2011 when it was overtaken by the Chinese mainland for the first time.

Taiwan is now the fifth-largest Asian importer of LNG and last year received 16.6 million tonnes of cargoes.

The latest cargo for Taiwan from the Ichthys project, owned by Inpex of Japan and the French major Total, was delivered to the Yung-An terminal on the 182,000 cubic metres capacity carrier “Pacific Breeze”

The “Pacific Breeze” was built by Kawasaki Heavy Industries of Japan and is the world’s largest vessel with spherical Moss-type LNG tanks.

The ship had left the Bladin Point export terminal near the Australian port of Darwin on November 17.

“Taiwan’s CNPC in line with the government’s new green energy policy is actively widening its sources of imported LNG,” said CPC.

“Ichthys LNG signed an agreement with CPC in January 2012 to supply 1.75 million tons per year from the Australian plant,” it added. Taiwan already receives shipments from other projects in Australia.

CPC in July 2018 signed an accord with US LNG producer Cheniere Energy for the supply of 2 MTPA of cargoes for 25 years.

Hoegh LNG pleased with China charter and four possible tenders

LNG Journal editor

Hoegh LNG, the Norwegian fleet owner, posted a rise in third-quarter net income and higher revenues from new floating storage and regasification unit (FSRU) charters, while it was in the final round of tenders for four other projects.

Hoegh reported quarterly net profit of \$5.96 million, up from \$1.10M in the year-ago quarter, though down on the \$7.84M recorded in the second quarter.

Revenues

The company said total revenue for the period was \$82.3M compared with \$64.4M a year ago and \$75.8M in the second quarter.

“The increase is mainly a result of higher revenues generated by ‘Hoegh Giant’ and ‘Hoegh Esperanza’, as well as \$2.1M in revenue recognition of insurance proceeds,” said Hoegh.

The company also noted that its growing earnings during the third quarter were offset by a one-off impairment of \$9.0M re-



Hoegh President and Chief Executive Sveinung J.S. Stohle

lating to jetty equipment previously installed for the Ain Sokhna import project in Egypt, which was part of the “Hoegh Gallant” FSRU charter to Egyptian Natural Gas Holding Company.

According to President and Chief Executive Sveinung J.S. Stohle, the results were Hoegh’s best underlying quarterly results on record.

Among company highlights, the “Hoegh Esperanza” commenced FSRU operations in Tianjin port in northeast China.

The FSRU arrived in Tianjin in early November and started commissioning for operations on a

three-plus-one-year FSRU-carrier charter with China National Offshore Oil Corp.

Hoegh LNG also announced an investment in October of \$24.75M in Avenir LNG, a joint venture also involving Norwegian peers, Golar LNG and Stolt-Nielsen.

“The results reflect continued operational excellence and a full quarter of income from ‘Hoegh Esperanza’ under its contract with CNOOC in China,” said CEO Stohle.

“Our financial position is solid, and with debt commitments received for the financing of our two newbuildings,” he added.

Fredriksen-backed Flex reports vibrant charter market and revenue

Flex LNG, the growing LNG shipping company with four vessels operating and nine others on order and whose shareholders include trusts connected to Norwegian magnate John Fredriksen, reported rising third-quarter revenues of \$19 million and a booming winter charter market.

Flex, which is listed on the Oslo bourse, reported nine-month revenues of \$41.1M. Gross quarterly earnings were 12.7M compared with a loss of \$4.1M in the same three months of 2017.

Third-quarter net profit came in at \$1.2M compared with losses of \$4.0M in the same 2017 quarter.

Flex Chief Executive Oystein M. Kalleklev, who is also acting as

Chief Financial Officer, said his company had “rapidly become the largest owner of modern fifth-generation LNG carriers” with a fleet expansion from six to 13 vessels since May 2018.

“Unlike the vast majority of other LNG shipping companies, we decided to strategically pursue shorter term employment until the shipping market showed signs of rebalancing,” explained Kalleklev.

“As interest for large modern vessels have been very high in the winter season, Flex LNG is pleased to announce that it has already covered all available days for the fourth quarter,” said the company, in reference to its four ships in operation.

Flex said that because of the charter positions it expected revenues for the fourth quarter would be around \$35M, almost double the third-quarter’s \$19M.

“The market has now rebalanced with current fixtures now being agreed at all-time high rates. Thus, Flex LNG is very well positioned to reap the benefit of our strategy,” said the CEO.

“This is somewhat evidenced by the company’s improved financial performance in the third quarter, but more importantly highlighted by the very strong guidance for the fourth quarter as well as the outlook for next year,” he added.

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NEWS NUDGES

French ships boost

The French container shipping company CMA CGM, which is developing LNG-powered vessels, posted a 6.3 percent rise in third-quarter revenues to \$6.06 billion from \$5.70Bln in the year-ago quarter. The shipping line is awaiting the delivery of nine new LNG-fueled vessels from Chinese shipyards from 2020. During the quarter, CMA CGM said it exceeded 5 million containers shipped, attributable to continued strength in the Transpacific, India-Oceania and African trading areas. The company said third-quarter operating income amounted to \$241M.

Vopak raises Pakistan stake

Royal Vopak, the Dutch international petroleum and commodities storage company, has purchased an additional 15 percent stake in Pakistan's first LNG import facility at Port Qasim, east of Karachi, taking its total shareholding to 44 percent. The Pakistani terminal is a floating storage and regasification unit under charter for 15 years and has been in operation since 2015.

Skangas to be Gasum

Skangas, the Norwegian LNG infrastructure and distribution company for the Nordic region, has had its name changed to Gasum. The Finnish natural gas network owner Gasum increased its shareholding in Skangas from 70 percent to 100 percent in October 2018 by purchasing the balance of the shares from the Norwegian Lyse Group. "The name change will strengthen the Gasum brand in the Nordic countries and the position of Gasum as the leading provider in the region," said the Finnish company.

Gothia Tanker Alliance takes delivery of fourth China-built LNG-fueled ship

LNG Journal editor

The Swedish Gothia Tanker Alliance said its fourth LNG-fueled vessel, the "Fure Valo", has been delivered by the Avic Dingheng shipyard in eastern China from a series of six on order.

The vessel was named on November 17 and delivered to owners Furetank on November 27.

Grouping

The Alliance, based in the Swedish port of Gothenburg, is a group of seven companies operating in the Baltic and North Sea regions and who cooperate in the coastal tanker business with a combined fleet of more than 50 vessels.

The companies taking delivery of the six vessels from China's Avic Dingheng yard are the Swedish shipping lines Furetank Rederi AB, Rederi AB Alvtank and Thun Tankers BV.

The "Fure Valo" is vessel number four in the series of dual-fuel ships with LNG capability to join



'Fure Valo' delivered by China's Avic Dingheng shipyard

the Alliance. Two of the ships are still being built and at the end of the programme for the six intermediate-sized tankers, Furetank will own three, Alvtank two and Thun Tankers one.

The Avic Dingheng yard was only founded in 2006 in the Jiangdu Development Zone on the Yangtze River in China's eastern Jiangsu Province.

The yard specializes in stainless-steel chemical tankers and

gas carriers. The Chinese are constructing and delivering the Swedish ships with 1A-Ice class and 19,900 cubic metres capacity.

The tankers now delivered are the "Fure Vinga", the "Ramanda", the "Thun Venern" and the "Fure Valo".

"Our dual-fueled, next generation intermediate tankers providing safe and sustainable transportation for our clients," said Furetank.

Swedegas heads Nordic coalition for LNG bunkering at Gothenburg

Swedegas, the Swedish gas network operator and liquefied natural gas distributor, said its LNG bunkering station at the Port of Gothenburg is ramping up for growing demand expected from Nordic shipping companies as using clean-fuel also qualifies operators for lower port charges.

The LNG bunkering facility is the first in Sweden that allows vessels to take fuel from a fixed pipeline as they load and discharge cargoes, reducing the turnaround time in port.

The Port Authority has also introduced an environmental discount on the port charge as part of a drive to increase the number of calls by vessels powered by LNG.

"The discount has been a strong contributing factor behind

many companies switching to LNG. In our endeavour to sustain this trend, we decided to extend the discount period by a further two years to 2020," said Jill Soderwall, Vice President of Business Energy at the Port.

The International Maritime Organization's 0.5 percent sulfur cap on fuel is being introduced in 2020 while Sweden and its Nordic neighbour already operate in an Emission Control Area, encouraging the use of cleaner fuel such as LNG.

The shipping company Terntank was the very first operator to take on LNG at the facility in Gothenburg, while liquefied biogas (LBG) made from waste has also been sold as fuel.

"Being able to offer this unique opportunity represents a major

breakthrough, not only in facilitating the transition to LNG, but also in gradually increasing the proportion of renewable gas," said Johan Zettergren, Chief Executive of Swedegas, which owns and runs the bunkering facility.

The LNG bunkering station is the only one of its kind in Sweden. Designed from the very outset to handle both LNG and LBG, which in terms of chemical composition are largely identical, makes the new facility flexible to meet the needs of the clean-fuel transition of the shipping sector.

The LNG and LBG that has been bunkered in Gothenburg was supplied by the Norwegian company, Barents NaturGass, which has long experience of gas distribution.

French energy major Total is still boosting company expansion along the LNG value chain

LNG Journal editor

French energy major Total said it was accelerating its expansion along the liquefied natural gas and gas value chains with a strategy based on strong growth in the LNG divisions.

The strategy was outlined by Philippe Sauquet, President of Total's Gas, Renewables & Power division in a newsletter sent to Total shareholders and investors.

Impacts

"Commodities on the entire energy supply chain follow cycles, but if we are present along the entire supply chain, the impact of these cycles is more limited," said Sauquet.

"We saw this happen with oil, when its price was halved in 2014-2015. The Upstream segment was under pressure, but our downstream business helped us to resist. We are following the same strategy in the gas chain," he stated.

"Our integration starts quite high upstream on the gas chain that leads all the way to electricity, considering that 60 percent of all gas is used to generate electricity," explained Sauquet.

Total is a world leader in LNG, with solid and diversified positions



Philippe Sauquet: President of Total's Gas, Renewables and Power division

amounting to around 40 million tonnes.

The French group is involved in LNG plants in Indonesia, Nigeria, Norway, Oman, Qatar, the United Arab Emirates, Yemen, Angola, Australia and Russia.

Its most recent LNG joint venture production plants to come on stream are the Yamal project in the Arctic region of Russia and Ichthys facility in Australia's North Territory.

Total noted that it was also present in renewable energies, which are expected to experience strong growth along with gas and LNG.

Sauquet recalled that the ac-

quisition of the LNG assets of French utility Engie allowed Total in 2017 to expand and reach a 10 percent global market share before the Yamal and Ichthys plants came on stream.

"Gas is the ideal complement to intermittent renewable sources of energy and offers many advantages in that it's abundant, flexible and contributes to reducing atmospheric pollution," the executive told shareholders in explaining the advantages of being an integrated gas chain player.

"We are present all along the supply chain, from production, through liquefaction, trading and shipping where we hold the second position worldwide for LNG, regasification, where we are the major European player, all the way to gas and electricity marketing," he said.

"Historically, in the gas business, we were mostly upstream, in production and liquefaction, and not as much downstream, because gas and electricity markets were organized as public service monopolies. But those markets then opened up to competition," explained Sauquet.

"We are faced with Utility company competition, of course. These are often former public ser-

vice monopolies, trying to defend their market shares," he said.

"As far as we are concerned, we are not trying to be monopolies. We consider that competition is natural. Our advantage is not having old assets to manage such as coal-fired power plants," added Sauquet.

The Total executive added that the company was seeking to develop new outlets in transportation for LNG and gas fuel.

"To meet this objective, we purchased PitPoint, a Dutch company and the third natural gas vehicle fuel operator in Europe, and acquired 25 percent of Clean Energy, a leading supplier of natural gas for the trucking industry in the United States," he said.

"We are also developing our activities in maritime transportation. Total signed an LNG supply contract with CMA CGM, a leading shipping group worldwide," he added.

"LNG as a marine fuel will be boosted by new regulations set to be implemented on January 1, 2020, and designed to reduce air pollution.

"Besides new uses for gas, we are also trying to develop new gas markets in Africa and Asia, in countries with growing energy needs," said Sauquet.

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US Gulf federal waters have 16 projects in start-up mode

After a 20-year decline in natural gas production in US federal waters of the Gulf of Mexico, a total of 16 production fields are currently in start-up mode, according to a report from the US Department of Interior.

"These new field starts may slow or reverse the long-term decline in GoM production," it said. The 16 projects have a combined natural gas resource estimate of about 836 billion cubic feet.

Analysts said that the new output and offshore development is starting as LNG export projects on the Gulf coast gather pace in Louisiana and Texas and could provide replacement volumes in the domestic market for exported LNG cargoes boosted by shale-gas resources.

The new projects are the first in the federal Gulf waters 2016, when five projects in the Mississippi Canyon and Green Canyon protraction areas added 1,429 Bcf of natural gas.

Twelve of the 16 new projects are located in Mississippi Canyon and Green Canyon protraction areas.

The others are in the Western GoM planning area (such as West Cameron) or the Eastern GoM planning area such as De Soto Canyon or Viosca Knoll, among others.

Marketed natural gas production in the Gulf of Mexico averaged 2.6 billion cubic feet per day for the first eight months of 2018, accounting for 4 percent of total US production.

The decline in GoM production occurred as the number of producing wells fell from 3,271 in 2001 to 875 in 2017.

France's GRTgaz and Terega have ample winter storage and LNG

LNG Journal editor

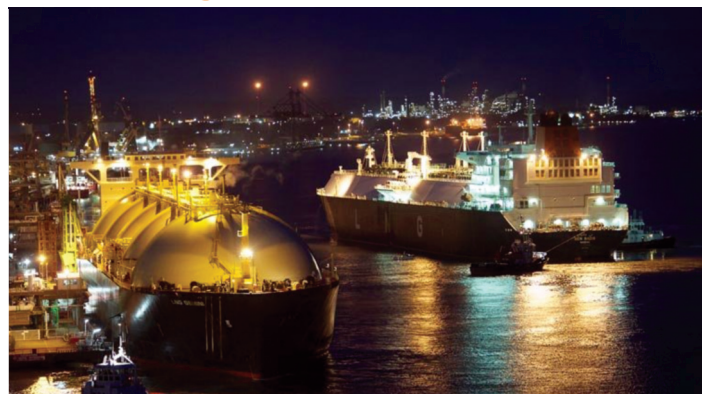
French natural gas network operators, GRTgaz and Terega, are confident they have lined up sufficient underground storage and supplies of LNG to ensure the smooth operation of the nation's gas system throughout the winter.

"This year, the gas transmission operators do not have anything particularly alarming to report at the start of this winter gas season," said both companies in presenting their "Winter Outlook 2018-2019".

CEO pledges

GRTgaz Chief Executive Thierry Trouve and his Terega counterpart Dominique Mocky stressed that the gas system should be able to meet the demands of all French gas consumers, even in the event of an exceptional cold spell.

"This analysis is based on the capacity offered to shippers as well as the level of volumes booked for supplying the network at the various entry and exit points (cross-border interconnections, LNG terminals, underground stor-



French Atlantic coast LNG terminal at Montoir-de-Bretagne

age facilities)," said the Outlook.

"Projections show that a minimal supply of LNG and/or entries from Spain are nonetheless necessary to cover the balance and manage the network bottlenecks for cold winter scenarios or in the event of a spike in gas demand," it added.

At the start of November, the level of volumes booked in the storage facilities totalled 128 billion kilowatt hours, the highest level since 2010.

"Regulation of storage introduced in early 2018 led to an intense injection campaign from May to October," added the report.

"GRTgaz (national network) and Terega (southern regional network) have no particular alert to give before the start of this winter," it stated.

"Indeed, the capacities offered to the shippers as well as their subscription levels for the winter of 2018-2019 (all points taken together) are sufficient to cover the supply for French consumers in the event of a cold peak, even if the shipping customers decide to maximise their use of the subscribed exit capacities to Switzerland and Spain," explained the report.

Papua New Guinea retains KBR to advise on LNG plant expansions

KBR Inc., the leading US liquefied natural gas engineering company, said it was retained by the Papua New Guinea Department of Petroleum to provide consulting, advisory and engineering services for multiple projects linked to the Oceania nation's LNG expansion.

"Under the terms of the agreement, KBR will provide these services utilizing strategy and technical specialists from multiple offices including Singapore, Australia, London and Houston," said the US company.

KBR is one of the most experienced global LNG engineering companies and has been part of joint ventures that built plants in Africa, the Middle East and the Asia-Pacific region, including most

recently the Ichthys and Gorgon LNG plants in Australia.

The ExxonMobil-operated PNG LNG plant and a related venture called Papua LNG are planning to build three new liquefaction Trains to double output to more than 16 million tonnes per annum.

The other stakeholders in addition to the US major include Australian-listed Oil Search and Santos, French energy major Total, Japan's JX Nippon Oil & Gas and the PNG government and its agencies.

The shareholders in the expansion are still finalizing the details of the financial aspects of the joint ventures before a final investment decision in 2019.

Two new processing Trains are

to be supported by the Papua LNG feed-gas from the Elk-Antelope field and one for the existing PNG LNG plant by the P'nyang field and associated resources.

Houston-based KBR said the PNG award was a testament to KBR's long-term strategic commitment to this promising and rapidly developing market.

"KBR is proud to help the Government of Papua New Guinea harness the full potential of their future energy developments," stated Jay Ibrahim, KBR President for regions outside the US.

"We are excited to showcase our extensive expertise to help grow this key market," added Ibrahim.

MISC Berhad acquires Med-class LNG ships from Eni with charters and conversion potential

LNG Journal editor

MISC Berhad, the Malaysian shipping line, has taken its liquefied natural gas fleet to 30 vessels by acquiring two older ships from Italy's energy company Eni and chartering them back to the Italians in a deal with the potential for the carriers to be future conversions for floating LNG projects.

MISC said that under the agreement with Eni's tanker shipping subsidiary it has acquired ownership of two mid-scale carriers known as "LNG Portovenere" and "LNG Lerici".

Mid-scale

The two vessels were delivered from the shipyard in 1996 and 1998 respectively and are Med-class vessels of 65,000 cubic metres capacity, originally ordered to ship cargoes from Algeria to Europe.

However, the "LNG Portovenere" and "LNG Lerici" are currently trading in the Asia-Pacific region.

"The five-year charter period (for Eni) will tentatively commence in December 2018 for 'LNG Portovenere' and January 2019 for 'LNG Lerici', with an estimated



Delegations at signing of agreements in Italian city of Milan. MISC's and Eni's signatories were MISC VP of LNG Zahid Osman and Eni's LNG Shipping head Riccardo Baratozzi

combined contract value of US\$133 million," said the Malaysian company.

During the signing of the charter-party agreements in the Italian city of Milan, MISC was represented by its Vice President of LNG Business, Zahid Osman, while the contracts were signed for the Italian by their head of the LNG Shipping unit, Riccardo Baratozzi.

MISC's President Group Chief Executive Yee Yang Chien said the acquisition of the two vessels as well as the charters will further strengthen MISC's position as one of the leading international LNG shipping fleet owners.

"In view of the evolving market-

place, there is certainly potential for us to diversify our solutions by including mid-scale and small-scale LNG transportation," said Yee.

"This is especially true when applied to the growing spot market demand for LNG trading and this will enable MISC to develop its capability in the trading of multiple-sized vessels," stated the CEO.

MISC's main client for charters is the Malaysian energy company and prominent LNG market participant Petronas.

It currently charters most of MISC's LNG fleet comprising 28 LNG carriers and two floating storage units with a combined dead-weight tonnage capacity of over 2

million dwt. "The delivery of 'LNG Portovenere' and 'LNG Lerici', will increase MISC's fleet of LNG carriers to 30," said the company.

CEO Yeo added that the mid-sized LNG carriers also presented "unique opportunities" that support MISC's efforts to venture into non-conventional LNG shipping projects.

"Upon expiry of the charter parties, these vessels will have the potential to be converted into mid-sized Floating Storage Regasification Unit (FSRU), Floating Storage Unit (FSU) or other alternative LNG floating projects," he explained.

The LNG carrier acquisitions come as MISC's group revenue for the third quarter dropped 3.7 percent to 2.22 billion Malaysian Ringgit (\$532.05M).

Group operating profit came to 354.5M Ringgit (\$84.7M) for the quarter, down 47.7 percent from the same quarter of 2017.

MISC said the decrease was mainly from the Heavy Engineering segment as additional cost provisions were made for ongoing projects and additional costs incurred on conversion works.

Spanish ferry company Balearia starts trials for LNG-powered vessels to serve in West Med

Spanish ferry company Balearia is continuing with its build-out of dual-fueled ferries with liquefied natural gas capability by starting sea trials for its latest vessel as it increases cleaner LNG fuel use for its Mediterranean routes.

Balearia's ferries link the Spanish mainland to Spain's islands such as Majorca, Menorca, Ibiza and the Spanish territories in North Africa, Ceuta and Melilla.

Naturgy Energy Group, the Spain-based utility company and prominent LNG market participant, formerly known as Gas Natural Fenosa, has signed a 10-year bunkering contract to supply LNG fuel to the ports served by

Balearia's ferries. The Spanish ferry line's second new vessel to use LNG fuel will be the "Marie Curie", which has just left the Italian shipyard, Cantieri Navale Visentini, based in Donada near Venice, to begin sea trials.

The sister ship of "Marie Curie" is already near full completion and fitting at the Italian yard and is named "Hypatia de Alejandria".

"Both vessels will be the first LNG-propelled ferries to sail the Mediterranean," said Balearia.

"The investment in building these two smart ships, which will be pioneers in the Mediterranean, totals 200 million euros (\$225M)," said Balearia.

Each vessel is 186.5 metres in length with a maximum speed of 24 knots and capacity to carry 810 people, 2,100 linear metres of cargo and 150 vehicles. The dual-fuel LNG engines have 20,600 KW of power.

"The 'Hypatia de Alejandria' is to begin operating at the beginning of the year and the 'Marie Curie' a few months afterwards," added the company.

Balearia said the use of LNG as a fuel is a strategic commitment to comply with social responsibility and to help with profitability.

The company has pledged to have at least half of its fleet of 25 ferries sailing with clean energy

within the next three years and for all its vessels to be LNG-powered within 10 years.

Besides these two ships, Balearia has ordered a large fast ferry with LNG engines from the Armon shipyard in Asturias in northern Spain.

"Furthermore, the first of the six ships in the fleet to switch to natural gas-propelled engines was refitted in November," added the company.

Balearia said the retro-fitting project was being partially funded by the European Union with 12 million euros in grants out of the total 72M euros of investment.