LNG Shipping News

AN LNG JOURNAL TITLE ON LNG CARRIERS 24 May 2018

Arctic LNG transhipment hub planned

Novatek has confirmed, through the Russian newswire Interfax, that it is to set up transhipment hub at Bechevinka, an abandoned Russian Navy base in Kamchatka.

It will cost up to $1.5 bill and will have a capacity to handle up to 20 mill tonnes of LNG per year, Novatek Deputy Head, Aleksandr Fridman told Interfax.

At Bechevinka, Arc7s will discharge the LNG for onward transportation by conventional LNGCs.

The Interfax report said that preparation for the new terminal's construction is already underway.

In October 2017, Novatek signed a co-operation agreement with the regional government of Kamchatka to build a new terminal. In a statement at the time, company CEO, Leonid Mikhelson said that the terminal "...will allow us to optimise our transport logistics, more efficiently deliver LNG from the Arctic, stimulate the development of the Northern Sea Route (NSR) and create a hub for deliveries of LNG to consumers in the countries of the Asian-Pacific region."

The terminal will be a key logistics hub for the Yamal LNG project, as well as for future Arctic LNG production projects, the report said.

Last year, Novatek signed agreements with Chinese National Petroleum Company (CNPC) and China Development Bank for the Arctic LNG 2 project. Construction is expected to begin next year, with the first of three trains coming on stream by 2023. As with Yamal, LNG will be exported via the NSR.

Arc7s will soon be transhipping gas in Kamchatka

New subsidiary

In addition, on 18th May, Novatek announced the forming of a new transportation subsidiary - Maritime Arctic Transport LLC - to manage and optimise transportation costs, build up Arctic navigation competencies and ensure centralised management of the Arctic fleet.

Mikhelson said: "Novatek's long-term development strategy envisages a significant growth in LNG production from the company's vast hydrocarbon resource base located on the Yamal and Gydan peninsulas in the Arctic zone of more than 55 mill tonnes per annum by 2030.

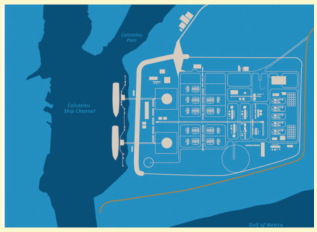
"Therefore, establishing an efficient Northern Sea Route shipping model is one of our key priorities to realise our long-term strategy. Creating our own shipping company fully supports this goal and will optimise transport cost and ensure a well-balanced, centralised management structure to improve the competitiveness of Novatek's Arctic projects," he explained. ■

> "[The terminal] will allow us to optimise our transport logistics, more efficiently deliver LNG from the Arctic..."
>
> *- Leonid Mikhelson , CEO, Novatek*

SHIPPING NEWS AGENDA

MARKETING

BUSINESS



FINANCE

TECHNOLOGY

LNG ORDERBOOK

USCG assesses proposed Coos Bay LNG terminal

The US Coast Guard completed a review of a Waterway Suitability Assessment plan submitted by KSEAS Consulting on behalf of Jordan Cove LNG for its planned Coos Bay, Oregon LNG terminal, on 11th May, 2018.

Based on the review, the Captain of the Port Sector Columbia River recommended to the US Federal Energy Regulatory Commission (FERC) that the waterway in its current state be considered suitable for LNG marine traffic associated with this project.

The USCG received an official notification on 9th January, 2017 of the company's proposal to build an LNG terminal at Coos Bay.

USCG Sector Columbia River personnel have worked with the applicant, state and local emergency response providers, as well as port and community stakeholders, to assess the safety and security issues associated with LNGCs sailing into Coos Bay.

"We continue working with local officials and the port community to ensure that every measure is taken to ensure the excellent safety record of the marine transport of LNG is continued if an LNG terminal is built in Coos Bay," said Capt William Timmons, USCG Captain of the Port, Sector Columbia River. "At this point, the waterway can accommodate the types of vessels associated with the proposed Jordan Cove LNG facility. We are working together to make sure that any resource issues are resolved through the Emergency Response Planning Process."

Safety & security

The USCG said it will continue working with FERC on the development of an Environmental Impact Statement (EIS) that addresses the effects of the proposed safety and security measures along the waterway.

FERC is responsible for authorising the location, construction, and operation of onshore LNG facilities. Once it completes a review of an application for an LNG facility it is required to complete an EIS.

In the EIS, FERC evaluates issues ranging from biological to socio-economic and security impacts.

The USCG will serve as a co-operating agency for FERC's EIS.

If the facility passes FERC, Jordan Cove LNG will be required to submit an emergency response plan and transit management plans that identify the resources necessary to support the Waterways Suitability Analysis and facility operation.

The applicant will also have to document its cost sharing arrangements with the affected communities for project related expenses. ■

ICIS launches LNG supply forecasting tool

Market intelligence and analytics provider, ICIS, has launched a new forecasting tool to meet the need for complex information required to monitor the LNG supply and its influence on global energy markets.

'LNG supply forecast' is an events-based approach to forecasting, the company explained. The two-year view of the global LNG supply starts at the most granular level with forecasts for each of the world's liquefaction plants. It then uses the ICIS global reporting capability to identify all the events and news affecting supply.

The global analysts team calculate and quantify the immediate supply impact for each of these events and immediately make this volume change transparent on the forecast platform.

ICIS Energy Product Director, Louise Boddy, said: "We found that our LNG customers needed support in monitoring the world's supply events and giving a logical, data-based view on their impact in a very short time frame. Trust was always the most important factor for our development partners and the transparency provided by this forecast builds that trust.

"Being able to identify significant events and assess their impact fast is a capability we think will make a real difference to those in the global gas market who need to quantify news impact for their businesses.

"Accurate forecasting is vital for LNG and gas traders and analysts; it also affects profit for utilities and integrated energy companies. Our constantly updated two-year forecast supports their market analysis and decision making process.

"The new ICIS forecasting tool offers a unique forward-looking perspective backed up by robust analytical functionality that drills into the data to reveal the true impact of supply as it changes," she explained. ■

US shale gas cargo heads for Israel

Israel is about to receive its first US LNG cargo.

The LNGC 'British Diamond', managed by BP Shipping, is due to arrive at Israel's Hadera import terminal on 27th May after sailing from Cheniere Energy's Sabine Pass in Louisiana on 3rd May, according to ship tracking data compiled by Bloomberg.

Until now, most Hadera cargoes have come from Trinidad and Tobago, which also exports to the US.

Israel's gas imports may drop in the coming years as the nation produces more gas from domestic fields.

Earlier this year, Dolphinus Holdings, a private Egyptian company, agreed to buy gas from Noble Energy and its partners from Israel's two largest offshore fields - Leviathan and Tamar - Bloomberg said. ■

LNG Shipping News
1st Floor, 30 Warner Street
London EC1R 5EX
United Kingdom
www.lngjournal.com
Tel: +44 (0)20 7253 2700

Publisher
Stuart Fryer

Editor
Ian Cochran
+44 (0) 7748144265
cochran@tankeroperator.com

Ad sales enquiries
Narges Jodeyri
+44 (0)20 7017 3406
narges@lngjournal.com

Subscriptions
Elena Fuertes
Tel: +44 (0) 20 7253 2700
elena@lngjournal.com

Production
Vivian Chee
Tel: +44 (0) 20 8995 5540
chee@btconnect.com

Venture Global agrees SPA with BP

Venture Global Calcasieu Pass, a subsidiary of Venture Global LNG has entered into a 20-year Sales and Purchase Agreement (SPA) with BP.

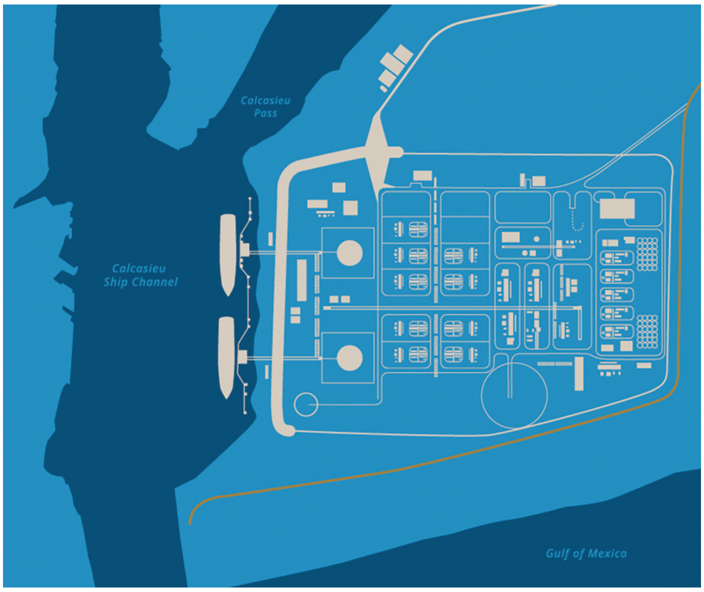
This SPA calls for the supply of 2 mill tonnes per annum of LNG from the Calcasieu Pass LNG export facility, currently under development in Cameron Parish, Louisiana.

BP will purchase LNG on a free on board basis (FOB) for a 20-year term starting from the commercial start up date of the export facility, currently expected in 2022.

Mike Sabel and Bob Pender, co-CEOs of Venture Global LNG, said; "We are delighted that BP, one of the world's leading international oil and gas companies, has committed to purchase 2 mill tonnes per annum from our Calcasieu Pass LNG export facility, bringing our total contracted quantity under binding 20-year SPAs to 6 mill tonnes per annum.

"BP joins Venture Global's other world-class LNG partners, including Shell, Edison SpA and Galp. As we finalise our arrangements for Calcasieu Pass and proceed towards financing, we have now begun to execute binding commitments for our Plaquemines project, which will also supply low-cost, long-term LNG to our global customers," they said.

Venture Global LNG is developing both the 10 mill tonnes per year Calcasieu Pass facility on an 1,000-acre site located at the intersection of the Calcasieu Ship Channel and the Gulf of Mexico and the 20 mill tonnes per year Plaquemines LNG facility in Plaquemines Parish, Louisiana on an 630-acre site on the Mississippi River, 30 miles south of New Orleans.



A plan of Global Venture's proposed Calcasieu Pass export terminal

Venture Global has raised $525 mill of capital to-date to support the development of its projects, the company claimed.

Teekay LNG makes provision for capital lease tax

The UK taxing authority (HMRC) has recently challenged the use of lease structures by third parties in the UK courts, similar to the Teekay Nakilat Joint Venture.

One of the challenges was eventually decided in favour of HMRC, with the lessor and lessee choosing not to appeal further.

This case concluded that capital allowances are not available to lessors. On the basis of this, HMRC is now asking lessees on other leases, including the Teekay Nakilat JV, to accept that capital allowances are not available to their lessors.

Under the terms of the lease, the lessor is entitled to make a determination that additional rentals are due, even where a court has not made a determination on whether capital allowances are available or where discussions are otherwise ongoing with HMRC - such that additional rental paid may be rebated in due course if the final tax position is not as determined by the lessor.

On 10th May, 2018, the lessor made a determination that additional rentals are due under the leases. As a result, during the first quarter of this year, the Teekay Nakilat JV recognised an additional tax indemnification guarantee liability of $53 mill for a total liability of $65.6 mill (£46.9 mill), as at 31st March, 2018.

The Teekay Nakilat JV said it was in discussions with HMRC in relation to the correct tax treatment to be applied to the leases and with the lessor regarding the timing and amount of this potential liability for additional rentals.

Background

Teekay LNG Partnership owns a 70% interest in the JV, which wholly owns a subsidiary - the lessee under three separate 30-year capital lease arrangements for three LNGCs - the RasGas II LNG Carriers.

Under the terms of these leases, the lessor claimed tax depreciation on the capital expenditures incurred to acquire these vessels and paid the lessee an upfront benefit of $60.9 mill at the lease inception.

As is typical in these leasing arrangements, tax and change of law risks were assumed by the lessee, in this case the Teekay Nakilat JV. Lease payments under the lease arrangements were based on certain tax and financial assumptions at the commencement of the leases in 2006 and subsequently adjusted to maintain the lessor's agreed after-tax margin.

On 22nd December, 2014, the JV terminated the leases of the RasGas II LNG Carriers; however, it remained obligated to the lessor for changes in tax treatment (see page 6).

Koreans to pay for Kuwaiti LNG terminal

The Korea Export-Import Bank and the Korea Trade Insurance Corp are to provide $2.3 bill allowing three South Korean companies to build Kuwait's first LNG import terminal.

According to the Korea Export-Import Bank, the LNG import terminal project will cost $3.6 bill, with payment guaranteed by the Kuwait Petroleum Corporation (KPC).

The project will be implemented by Kuwait Integrated Petroleum Industries Co (KIPIC), a major affiliate of the KPC.

When the LNG import terminal is completed in 2021, 11 mill tonnes of gas will be supplied throughout Kuwait each year.

The Korea Export-Import Bank decided to provide $1.15 bill for the project, while the Korea Trade Insurance Corp will also put up $1.15 bill in export insurance.

Dynagas reports a drop in profit

Dynagas LNG Partners has reported a fall in net income for the first quarter of this year to $4.8 mill, compared with $12.9 mill in 1Q17.

Dynagas results were affected by the 'Clean Energy's' change of charter

Adjusted net income dropped to $7.2 mill, compared to $14.9 mill in 1Q17. EBITDA fell by 15% to $26.6 mill, compared to $31.3 mill in the 2017 period.

The Partnership's distributable cash flow for 1Q18 went down by 39.4% to $11.3 mill from $18.6 mill during 1Q17.

The decreases were due to - 1) lower revenues earned for the LNGC 'Clean Energy', which was employed under a short term charter during 1Q18, compared to 1Q17 during which the vessel was under a multi-year charter at a higher rate and 2) increased interest costs for servicing the secured debt, which was refinanced in March, 2017.

Falling rates

The average daily gross hire recorded in 1Q18 was about $66,300 (100% utilisation), compared with $76,700 per day per ship achieved in 1Q17 at 99% utilisation.

In July, 'Clean Energy' is due to be delivered to Gazprom for a period charter of up to about eight years.

CEO Tony Lauritzen said; "Our reported earnings for 1Q18 were, as expected, below those of the first quarter of 2017 and were impacted by the following (1) the temporary employment of the 'Clean Energy' on the spot market until July, 2018 when the vessel will commence a timecharter to Gazprom for a term of approximately eight years and (2) the longer term nature of our contracts following our decision to reduce the charter hire rate on two vessels, the 'Yenisei River' and the 'Lena River' with effect from November, 2016 in exchange for securing the long term charter with Gazprom for the employment of the 'Clean Energy'.

"These transactions contributed to an increase in our contracted backlog, thereby enhancing our revenue visibility.

"As the Partnership's shorter duration timecharter contracts at peak charter rates have expired or are approaching expiry, we have capitalised on our manager's operational track record and the versatility of the Ice Class designated LNGCs in our fleet to secure long term employment contracts.

"As of the date of this report, our estimated average remaining contract term is 10.2 years and our estimated contracted revenue backlog is approximately $1.5 bill, which highlights our ability to secure long term contracts during periods when the LNG shipping market has been highly competitive.

"On 3rd May, we paid quarterly cash distribution of $0.25 per common unit with respect to 1Q18. Since our IPO in November, 2013, we have paid total cash distributions of $7.04 per common unit. In addition, on 14th May, 2018, we paid a cash distribution of $0.5625 per unit on our series A preferred units for the period from 12th February to 11th May, 2018.

"With our fleet 85% contracted through 2018, 92% contracted through 2019 and 100% contracted through 2020, and with an estimated fleet-wide average remaining contract duration of 10.2 years, we believe we have significant cash flow visibility.

"Our intent is to seek additional contract coverage, particularly in 2018, to manage our operating expenses and to continue the safe operation of our fleet," he said. ■

Cheniere to go ahead with Train 3 at Corpus Christi

Cheniere Energy has made a positive Final Investment Decision (FID) with respect to Train 3 at the Corpus Christi liquefaction project (CCL).

In addition, Cheniere plans to issue a full notice to proceed to Bechtel Oil, Gas and Chemicals to continue construction, which began in late 2017 under limited notice to proceed.

This represents the first FID on new liquefaction capacity in the US since 2015, the company claimed.

"Moving forward with the construction of Train 3 at Corpus Christi reinforces our position as the leader in US LNG," said Jack Fusco, Cheniere's President and CEO. "I would like to recognise the Cheniere team, our financial partners, our EPC partner Bechtel and our long-term customers at the CCL project for their demonstrated teamwork, commitment and execution, which were critical elements in the successful commercialisation and financing of Train 3.

"We continue to see significant tailwinds in the global LNG market and look forward to delivering additional growth and value to shareholders," he added.

Cheniere's wholly owned subsidiary, Cheniere Corpus Christi Holdings, closed on its amended credit facilities on 22nd May, 2018, and total commitments under the credit facilities have been increased to $6.1 bill.

The amended credit facilities will be used to fund part of the costs of developing, constructing, and placing into service Trains 1, 2, and 3 and associated pipeline and other infrastructure at or near the CCL, and for related business purposes.

CCL's remaining costs are expected to be funded by Cheniere under its amended equity contribution agreement with Corpus Christi Holdings, and from cash flows generated by CCL's Trains 1 and 2 once they are commissioned.

This is a three Train liquefaction project under construction near Corpus Christi, Texas. Each Train is expected to have a nominal production capacity, which is prior to adjusting for planned maintenance, production reliability, and potential over design, of around 4.5 mill tonnes per year of LNG. ■

NEWS NUDGE

Ichthys nears production

Inpex Corp has said that the Ichthys LNG project offshore Australia will start production at the end of this month.

The company also said that it expects to ship the first LNG cargo from the plant at the end of September, following several delays.

Exmar wins charter for FSRU barge

Exmar has signed a 10-year charter with commodities company Gunvor for the provision of its newbuild FSRU barge for Bangladesh.

Exmar said the barge was currently at Keppel Shipyard in Singapore undergoing modifications after having been delivered from the Wison Offshore and Marine shipyard in Nantong, China, in December last year.

The FSRU barge is expected to arrive in Bangladesh in the fourth quarter of this year and start operations after its full commissioning, Exmar said, adding that Gunvor was keen to support the development of new LNG markets by providing reliable and efficient LNG infrastructure solutions.

GTT receives notification for two new LNGCs

GTT has received an order notification from an Asian shipyard for the design of the LNG tanks for two new LNGCs.

These vessels will be built on behalf of an undisclosed European shipowner.

GTT will design the LNG tanks of both units, which will be fitted with the NO96 GW containment system.

Their delivery is expected in 2020.

Tax problems and tanker write-downs impact Teekay LNG's results

Teekay LNG has reported a net loss of $6.9 mill for the first quarter of this year on a GAAP basis, compared with a net profit of $29.1 mill for 1Q17.

This sudden loss was mainly due to a tax indemnification provision and a write-down of conventional oil tankers, the Partnership claimed.

Adjusted net income was $22.1 mill in 1Q18, compared with $21.1 mill in 1Q17.

Distributable cash flow was $35.3 mill, compared to $43.2 mill in 1Q17 and total cash flow from vessel operations was $117.6 mill, compared to $109.2 mill in 1Q17.

Since the beginning of 2018, the Partnership has taken delivery of four LNGCs newbuildings, all entering long-term charters, and one mid-sized LPG carrier newbuilding.

The Teekay Corp daughter company also re-chartered the LNGCs 'Arctic Spirit' and 'Polar Spirit' for four years and one year, respectively, and extended the charter on the LNGC 'Torben Spirit' to December, 2018.

Debt refinanced

In May 2018, the Partnership refinanced an outstanding debt facility of $58 mill, due in 2018 with a new $90 mill long-term debt facility secured by seven mid-sized LPG carriers trading in the Teekay Multigas Pool.

"The results for the first quarter of 2018 included certain non-recurring items relating to a tax indemnification guarantee liability and lower utilisation on some of our LPG carriers, as they are transitioning into our Teekay Multigas Pool," commented Mark Kremin, President and CEO of Teekay Gas Group. "Despite these items, we continue to generate stable cash flows and I am pleased to report that since releasing our earnings in mid-February, we have made significant progress on various initiatives across the organisation.

"We have continued to take delivery of vessels on schedule as part of the world's largest LNG carrier newbuilding orderbook. In addition, we recently completed another 2018 refinancing and are making significant progress on the remaining refinancings, which are on track to be completed within the third quarter of 2018.

"Finally, the Partnership successfully re-chartered the 'Arctic Spirit' and 'Polar Spirit' LNG carriers for four years and one year, respectively, upon their redeliveries from Teekay Corp in May and March of this year. These new charter contracts, which will service the fast-growing LNG import market in China, will add further stability to Teekay LNG's market-leading portfolio of forward fixed-rate revenues. Looking ahead, we are excited by the strong LNG demand fundamentals and our position as one of the world's largest LNG transportation companies.

"Over the past seven months, we have taken delivery of only seven vessels out of our total LNG newbuilding programme of 18 LNGCs and a regasification terminal and therefore, a significant portion of the incremental $310 mill of annual cash flow from vessel operations we expect to generate from this programme when fully delivered, has not yet been reflected in our financial results.

"As the remaining newbuildings deliver through early-2020, which are all contracted on long-term charters, we expect further cash flow growth and natural delevering of our balance sheet," he concluded.

As of 31st March, 2018, the Partnership had total liquidity of $463.5 mill, comprised of $197 mill in cash and cash equivalents and $266.5 mill in undrawn credit facilities. ■

Teekay LNG's 'Torben Spirit' had her charter extended. Photo credit- MAN Diesel & Turbo

MISC suffers revenue drop

Petronas subsidiary and large LNG player, MISC suffered lower group revenue for the quarter ended 31st March, 2018, compared with the same quarter of 2017.

Group revenue of RM2,020.8 mill was 32.3% lower than the corresponding 2017 quarter's revenue of RM2,984.9 mill.

This decrease was mainly due to the Offshore segment, plus lower freight rates in the current quarter in the petroleum segment and lower number of operating vessels and charter rate from contract renewal in the LNG segment.

The 1Q18 group operating profit of RM383.4 mill was lower than the corresponding quarter's operating profit of RM681.3 mill as petroleum and heavy engineering segments both recorded operating losses in the current quarter caused by lower revenue as stipulated above.

MISC's LNG segment recorded a lower operating profit, compared to corresponding quarter as the 1Q18 profit included recognition of compensation for early termination of an LNGC's timecharter contract.

Group profit before tax of RM319.2 mill was also lower than the corresponding quarter's profit before tax of RM696.6 mill, as there was a recognition of gain on disposal of a vessel in the corresponding quarter and lower share of profits from joint ventures in the current quarter.

In the LNG shipping segment, spot charter rates eased off in 1Q18 on the back of diminishing winter demand and new tonnage deliveries, after a strong pick up towards the end of 2017.

Similar to petroleum shipping, the LNG shipping market is projected to face a weak spot market during the year, as a result of tonnage overcapacity, exacerbated by a large number of long term charter expiries.

Nonetheless, most of MISC's LNGCs are on secured long term charters. In addition, two new LNGCs will join the fleet in the first half of 2018 on long term charters, providing a boost to operating profits, MISC said.

MISC said it believed that a more stable and higher oil price environment this year will pave the way for a gradual recovery in global offshore oil and gas investments.

MISC has taken delivery of two LNGCs this year

Opportunities

The expected recovery in the number of projects approved represent opportunities for the Group, both locally and internationally, including opportunities in West Africa, Middle East and the Americas, MISC claimed.

MISC's President/Group CEO, Yee Yang Chien, said; "MISC Group will strive to sustain our financial performance and continue to focus on generating a target level of operating cash flow that will fund our pipeline of growth projects in the coming years. 2018 is expected to be another difficult year, nonetheless, the recovery of oil price will benefit the offshore sector the most and we are positive on the opportunities available on the upstream deepwater projects locally and globally.

"For LNG Shipping, our present portfolio of long term charters will support the steady financial performance of this segment. Overall, we remain optimistic on long-term prospects and our focus remains on ensuring the successful execution of our five-year business strategy towards attaining a sustainable level of secured profits by FY2020," he said. ■

Cove point cargo reaches Japan

Japan received its first LNG shipment earlier this week from Dominion Energy's newly completed Cove Point export plant (see LNG SN, 10th May, page 9).

The berthing of the 'LNG Sakura' at Tokyo Gas' Negishi terminal near Tokyo was claimed by Reuters to be another marker of shifting global energy flows as the US ramps up exports of shale gas and oil.

The cargo is the first of 2.2 mill tonnes of LNG per year Japanese companies are purchasing under long-term contracts from Cove Point in Maryland.

Tokyo Gas said in a statement the 177,000 cu m 'LNG Sakura' berthed on Monday to discharge about 70,000 tonnes of LNG.

The Japanese energy company has a contract to buy 1.4 mill tonnes of Cove Point LNG per year for 20 years. Kansai Electric Power (KEPCO) has contracted to take another 800,000 tonnes a year. ■

NEWS NUDGE

BW FSRU floated at DSME

BW LNG, part of BW Group, launched the FSRU 'BW Courage' at Daewoo Shipbuilding & Marine Engineering's (DSME) shipyard in Geoje, recently.

The 173,400 cu m FSRU, which has a length of 294.9 m and a beam of 46.4 m, is scheduled for delivery in February, 2019.

A second FSRU for BW Gas is due to be delivered at the end of next year.

The company has two more 173,400 cu m LNGCs on order due for delivery in the first half of 2020 from the builder's Okpo yard.

Small scale LNGC ordered

A small-scale 20,000 cu m LNGC was reported ordered at Jiangnan for the Ghana National Petroleum Corp.

According to brokers' reports, she is to be delivered in 2019.

Freeport LNG - application to export LNG

The US Department of Energy (DOE) has received an application from Freeport LNG Expansion, requesting authorisation to export LNG.

Comments must be received by 23rd July, it said.

Revamped Burckhardt compressor gives FSRU new life

The first patented Burckhardt Compression's Laby-GI compressor was installed on the FSRU'Golar Freeze' as a MSO (minimum send-out) compressor, helping to give the unit a new lease of life.

Golar Management in Norway had decided to re-market the vessel for a different operation that required a major revamp of her MSO compressor, for which Burckhardt was awarded the contract.

After nearly 10 years of reliable operation in a harsh marine environment with low maintenance, the robustness of the Laby-GI compressor has paid off, Burckhardt claimed, also commenting that this was the first compressor of its kind to be installed on an FSRU.

The FSRU's new charterer in Jamaica will use the compressor for a different purpose, delivering gas to the Jamaica's power utility, JPS. This requires an increase in discharge pressure from 45 to 65 barg that, in turn, requires an additional compression stage, along with its extra auxiliaries, piping and other modifications, the company explained.

An engineering study was first performed to verify the feasibility of the plan. After the analyses were completed, a clear picture of the necessary changes was available. The scope of the contract work was then defined, and a suitable offer was drawn up.

Gabriele Pipitone, Golar vessel manager, said: "The technical solution offered and the tight delivery time for this project completely met our expectations. Burckhardt Compression was proactive, available at the right time, with the right plan, the right offer and the right team. We are pleased to have found the perfect solution for revamping the MSO compressor." ■

NEWS NUDGE

Golar LNG Limited - 1Q18 results

Golar LNG's first quarter 2018 results will be released before NASDAQ opens on 31st May, 2018.

In connection with this, a webcast presentation will be held at 3:00 pm (London Time), the company said.

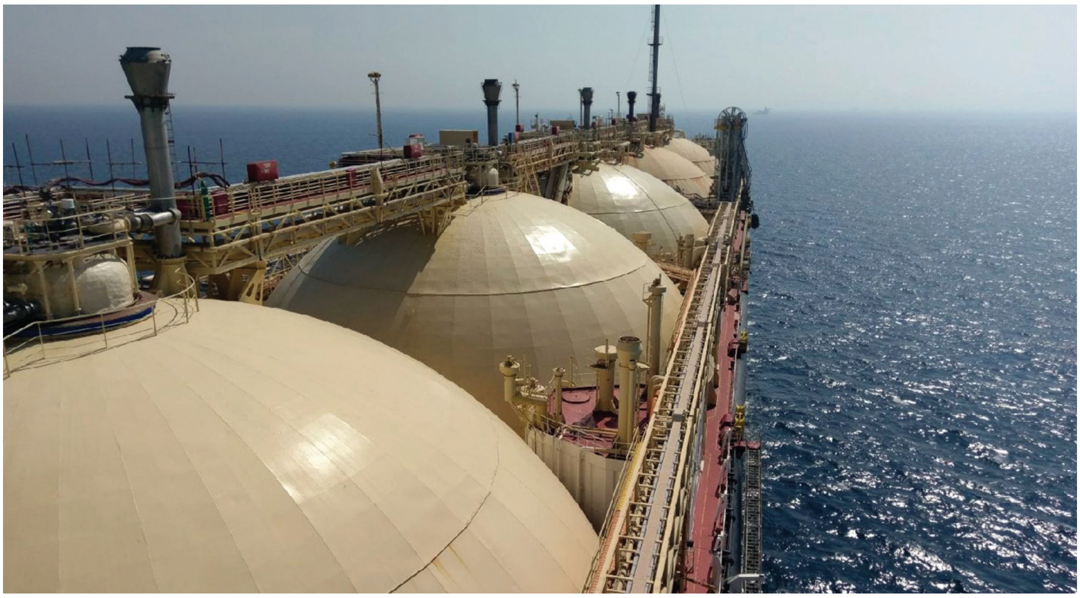
The presentation will be available to download from the Investor Relations section at www.golarlng.com

Japex on the hunt for cargoes

Japan Petroleum Exploration (Japex) is seeking LNG cargoes after its joint venture LNG project in western Canada was scrapped last year, according to a Reuters report.

The oil and gas developer is looking for between three to six LNG cargoes a year starting from 2020, sources told the newswire.

Japex has given the seller the option of delivering the cargoes over five or 10 years. Offers were thought due last Friday.



The 'Golar Freeze' is to be fitted with new compressors

Smit Lamnalco wins 20-year tug contract for Bahrain LNG terminal

Smit Lamnalco has won a 20-year contract to supply marine services to the National Oil and Gas Authority of Bahrain (NOGA).

The services will cover the Bahrain LNG terminal and will involve the use of four LNG terminal compliant 70-tonne bollard pull (bp) tugs.

The tugs will provide escort, berthing and unberthing of LNGCs at the Bahrain LNG FSU import terminal, which is jointly owned by Nogaholding, NOGA's investment and development arm, and a consortium consisting of Teekay LNG Partners, Gulf Investment Corporation (GIC) and Samsung C&T.

The import terminal will be located offshore about 5 km east of the onshore receiving facility at the Khalifa Bin Salman port. The terminal will supplement local gas production in Bahrain and ensure capacity to meet peak seasonal gas demand and industrial growth, according to Bahrain LNG. It is due to become operational in early 2019.

Smit Lamnalco will employ the four 70 bp tugs from its fleet for five years following which, four new purpose-built tugs will be deployed for the following 15 years.

"We are looking forward to working in partnership with NOGA and its partners to deliver safe and reliable marine services that exceed expectations, and we would like to thank them for demonstrating their faith in Smit Lamnalco by awarding the marine services contract to our team," said Smit Lamnalco CEO, Stanley Maas. ■

WORLD LNG CARRIER ORDERBOOK

Name	Containment System	Propulsion	Yard	Ordered	Delivery Date	Capacity	Primary Owner
Oceanic Breeze	Moss	STRH	Mitsubishi H.I.	2013	31/03/2018	155300	K-Line
Myrina	GT NO 96	MEGI	DSME	2014	01/04/2018	173400	Teekay LNG
British Partner	GT NO 96	MEGI	DSME	2014	01/04/2018	173400	BP
Marvel Falcon	GTT Mark III Flex	XDF	Samsung	2014	15/04/2018	174000	MOL
Castillo De Merida	TZ Mk. III	MEGI	Imabari	2014	01/05/2018	178000	Elcano
CESI Lianyungang	Membrane	TFDE	Hudong-Zhonghua	2012	01/05/2018	174000	China LNG Shipping Holdings
Flex Ranger	TZ Mk. III	MEGI	Samsung	2013	01/05/2018	174000	Flex LNG
Pacific Breeze	Moss	TFDE	Kawasaki	2013	01/06/2018	180000	K-Line
Mitsubishi Nagasaki 2316	Moss	STRH	Mitsubishi H.I.	2014	01/06/2018	153000	NYK
Diamond Gas Orchid	Moss	STaGE	Mitsubishi H.I.	2015	01/06/2018	165000	NYK
Pan Europe	GT NO 96	TFDE	Hudong-Zhonghua	2014	01/06/2018	174000	Teekay LNG
Megara	GT NO 96	MEGI	DSME	2014	01/07/2018	173400	Teekay LNG
Flex Rainbow	TZ Mk. III	MEGI	Samsung	2013	25/07/2018	174000	Flex LNG
Energy Liberty	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/08/2018	165000	MOL
Rudolf Samoylovich	GT NO 96	TFDE - Azipod	DSME	2014	01/08/2018	172410	Teekay LNG
Diamond Gas Rose	Moss	STaGE	Mitsubishi H.I.	2015	01/08/2018	165000	NYK
Enshu Maru	Moss	STRH	Kawasaki	2014	30/08/2018	164000	K-Line
Castillo De Caldelas	TZ Mk. III	MEGI	Imabari	2014	01/09/2018	178000	Elcano
Daewoo 2462 MOL E.On	GT NO 96	TFDE	DSME	2015	01/09/2018	180000	MOL
Vladimir Vize	GT NO 96	TFDE - Azipod	DSME	2014	01/09/2018	172410	MOL
Kinisis	GT NO 96	MEGI	DSME	2015	15/09/2018	173400	Chandris
Daewoo 2442	GT NO 96	MEGI	DSME	2014	01/10/2018	173400	BP
Daewoo 2427	GT NO 96	TFDE - Azipod	DSME	2014	01/10/2018	172410	Dynagas
Marvel Eagle	Moss	TFDE	Kawasaki	2014	15/10/2018	155000	MOL
Daewoo 2443	GT NO 96	MEGI	DSME	2014	01/11/2018	173400	BP
Boris Davydov	GT NO 96	TFDE - Azipod	DSME	2014	01/11/2018	172410	Dynagas
Marvel Hawk	GTT Mark III Flex	XDF	Samsung	2014	01/12/2018	174000	MOL
Mitsubishi Nagasaki 2321	Moss	STaGE	Mitsubishi H.I.	2015	01/12/2018	177000	NYK
Nikolay Zubov	GT NO 96	TFDE - Azipod	DSME	2014	01/12/2018	172410	Dynagas
Jmu Tsu 5071	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/01/2019	165000	NYK
Samsung 2150	GTT Mark III Flex	XDF	Samsung	2014	01/01/2019	174000	MOL
Maran Gas Spetses	GT NO 96	MEGI	DSME	2015	01/01/2019	173400	Maran Gas Maritime
Daewoo 2444	GT NO 96	MEGI	DSME	2014	01/01/2019	173400	BP
Mitsubishi Nagasaki 2323	Moss	STaGE	Mitsubishi H.I.	2015	01/01/2019	177000	MOL
Maran Gas Chios	GT NO 96	MEGI	DSME	2015	01/01/2019	173400	Maran Gas Maritime
Pan Africa	GT NO 96	TFDE	Hudong-Zhonghua	2014	01/01/2019	174000	Teekay LNG
Maran Gas Hydra	GT NO 96	MEGI	DSME	2015	01/01/2019	173400	Maran Gas Maritime
Hyundai Samho S856	TZ Mk. III	MEGI	Hyundai Heavy	2015	01/01/2019	174000	Teekay LNG
Gaslog Gladstone	TZ Mk. III	XDF	Samsung	2014	01/01/2019	174000	GasLog
Hyundai Samho S857	TZ Mk. III	MEGI	Hyundai Heavy	2015	01/01/2019	174000	Teekay LNG

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 29th March 2018

Fearnley LNG

Name	Yard	Containment System	Capacity	Propulsion	Delivery Date	Ordered	Primary Owner
Daewoo 2445	GT NO 96	MEGI	DSME	2014	01/02/2019	173400	BP
Kawasaki Sakaide 1734	Moss	STRH	Kawasaki	2015	01/03/2019	177000	MOL
Kawasaki Sakaide 1735	Moss	STaGE	Kawasaki	2015	01/03/2019	177000	MOL
Daewoo 2446	GT NO 96	MEGI	DSME	2014	01/03/2019	173400	BP
Mitsubishi Nagasaki 2326	Moss	STaGE	Mitsubishi H.I.	2015	01/03/2019	180000	NYK
Mitsubishi Nagasaki 2327	Moss	STRH	Mitsubishi H.I.	2015	01/03/2019	180000	NYK
Hyundai Ulsan 2937	GTT Mark III Flex	XDF	Hyundai Heavy	2016	01/04/2019	180000	SK Shipping
Jmu Tsu 5073	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/05/2019	165000	MOL
Diamond Gas TBN		STaGE	Mitsubishi H.I.	2015	01/05/2019	165000	Mitsubishi
Hyundai Ulsan 2964	GTT Mark III Flex	MEGI	Hyundai Heavy	2017	01/05/2019	180000	Knutsen
Flex Constellation	GT NO 96	MEGI	DSME	2017	01/06/2019	173400	John Fredriksen
Hyundai Ulsan 2963	GTT Mark III Flex	MEGI	Hyundai Heavy	2017	01/06/2019	180000	Knutsen
Hyundai Ulsan 2938	GTT Mark III Flex	XDF	Hyundai Heavy	2016	01/07/2019	180000	SK Shipping
Daewoo 2430	GT NO 96	TFDE - Azipod	DSME	2014	01/07/2019	172000	Teekay LNG
Maran Gas Syros	GT NO 96	MEGI	DSME	2014	01/07/2019	173400	Maran Gas Maritime
Gaslog Windsor	GTT Mark V	XDF	Samsung	2016	01/07/2019	180000	GasLog
MOL HUDONG-ZHONGHUA 1/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/07/2019	174000	MOL
Kawasaki Sakaide 1729	Moss	TFDE	Kawasaki	2014	01/08/2019	155000	MOL
Daewoo 2431	GT NO 96	TFDE - Azipod	DSME	2014	01/08/2019	172000	Teekay LNG
Flex Courageous	GT NO 96	MEGI	DSME	2017	01/08/2019	173400	John Fredriksen
Jmu Tsu 5072	SPB	TFDE	Japan Marine United Corp (Jmu)	2014	01/09/2019	165000	MOL
Daewoo 2432	GT NO 96	TFDE - Azipod	DSME	2014	01/09/2019	172410	MOL
Mitsubishi Nagasaki 2322	Moss	STaGE	Mitsubishi H.I.	2015	01/09/2019	177000	MOL
Daewoo 2466	GT NO 96	MEGI	DSME	2016	01/10/2019	173400	Maran Gas Maritime
Daewoo 2433	GT NO 96	TFDE - Azipod	DSME	2014	01/10/2019	172000	Teekay LNG
MOL HUDONG-ZHONGHUA 2/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/10/2019	174000	MOL
Daewoo 2467	GT NO 96	MEGI	DSME	2016	01/11/2019	173400	Maran Gas Maritime
Daewoo 2489	GT NO 96	MEGI	DSME	2015	01/11/2019	173400	BWGas
Daewoo 2434	GT NO 96	TFDE - Azipod	DSME	2014	01/11/2019	172000	Teekay LNG
Marvel Swan	GTT Mark III Flex	MEGI	Imabari	2015	01/01/2020	178000	K-Line
MOL HUDONG-ZHONGHUA 3/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/01/2020	174000	MOL
MOL HUDONG-ZHONGHUA 4/4	GT NO 96	MEGI	Hudong-Zhonghua	2017	01/04/2020	174000	MOL
HHI NYK/EDF	GTT Mark III Flex	XDF	Hyundai Heavy	2018	30/04/2020	174000	NYK
Daewoo 2478	GT NO 96	MEGI	DSME	2017	31/05/2020	173400	Maran Gas Maritime
Samsung 2213	GTT Mark V	XDF	Samsung	2017	01/06/2020	180000	GasLog
HHI Cardiff		XDF	Hyundai Heavy	2018	01/06/2020	174000	Cardiff Marine
HHI Sovcomflot		XDF	Hyundai Heavy	2018	01/06/2020	174000	Sovcomflot
Daewoo 2469	GT NO 96	MEGI	DSME	2016	30/06/2020	173400	Maran Gas Maritime

DFDE = dual fuel diesel engines, STRH = steam turbine reheat / ultra steam turbine, MEGI = marine electric gas injection, DRL = slow speed diesel, FSRU = vessel with regas capacity, FLNG = floating LNG production unit
Data last updated = 29th March 2018

WORLD SMALL SCALE LNG FLEET*

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
1974	Seagas	187	LNG	Sweden	Yes	AGA
1988	Kayoh Maru	1,517	LNG	Japan	Yes	Daiichi
1993	Aman Bintulu / Lucia Ambition	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1996	Surya Aki	19,475	LNG	Indonesia - Japan	Yes	MCGC
1997	Aman Sendai	18,928	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
1998	Aman Hakata	18,800	LNG	Malaysia - Japan	Yes	Perbadanan/NYK
2000	Triputra (ex Surya Satsuma)	23,096	LNG	Indonesia - Japan	Yes	MCGC
2003	Pioneer Knutsen	1,100	LNG	Norway	Yes	Knutsen
2003	Shinju Maru No.1	2,540	LNG	Japan	Yes	Shinwa
2005	North Pioneer	2,500	LNG	Japan	Yes	Japan Liquid Gas
2007	Sun Arrows	19,531	LNG	Malaysia - Russia - Japan	Yes	Mitsui
2008	Kakurei Maru	2,536	LNG	Japan	Yes	Hogaki Zosen
2008	Shinju Maru No.2	2,540	LNG	Japan	Yes	Shinwa
2009	Coral Methane	7,551	LNG/LPG/Ethylene	Northwest Europe/Baltics	Yes, sometimes	Anthony Veder
2010	Norgas Creation	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2010	Norgas Innovation	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Akebono Maru	3,556	LNG	Japan	Yes	Chuo Kaiun
2011	Norgas Bahrain Vision	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2011	Norgas Conception	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas Invention	10,000	LNG/LPG/Ethylene	Worldwide	No	Norgas Carriers
2011	Norgas Unikum	12,000	LNG/LPG/Ethylene	Worldwide	No	Teekay
2012	Coral Energy	15,600	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2013	Coral Anthelia	6,500	LNG/Ethylene			Anthony Veder
2013	JX Energy TBN	2,500	LNG	Japan	Yes	JX Energy
2013	Kakuyu Maru	2,500	LNG	Japan	Yes	Tsurumi Sunmarine
2014	LNG-Oil combi**	2,000	LNG	Germany	Yes	Veka
2014	Short Sea LNG Tanker **	4,000	LNG	Germany	Yes	Veka
2015	10 small carriers TBN**	5,000	LNG			Bimantara Group
2015	Jahre TBN**	6,200	LNG	Norway	Yes	Donsotank/Jahre Marine
2015	JS Ineos Ingenuity	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Insight	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	JS Ineos Intrepid	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2015	LNG Barge TBN	3,000	LNG	US Coast	Yes	LNG America
2015	LNG bunker barge 1†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG bunker barge 2†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG bunker barge 3†	2,250	LNG	China	Yes	Anhui Huaqiang Natural Gas
2015	LNG Inland bunker**	800	LNG	Germany	Yes	Veka
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
2015	Norgas TBN**	17,000	LNG/LPG/Ethylene	Worldwide		Norgas Carriers
2015	PetroChina TBN	30,000	LNG	China		PetroChina
2015	TBN	14,000	LNG	China	Yes	Zhejiang Huaxiang
2015	TBN 1	27,500	LNG	China?		Danyang?
2015	TBN 2	27,500	LNG	China?		Danyang?
2015	TBN 3	27,500	LNG	China?		Danyang?
2016	Clean Jacksonville	2,200	LNG	US Coast	Yes	CME
2016	Dalian TBN	28,000	LNG	China	Yes	Dalian Inteh Group
2016	Hai Yang Shi You 301	30,000	LNG	Bali FSU	Yes	CETS (CNOOC)
2016	JS Ineos Indepence	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Innvovation	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	JS Ineos Inspiration	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2016	LNG Prime	2,250	LNG	Northwest Europe	Yes	Veka Deen LNG
2016	Navigator Aurora	35,000	Ethane/Ethylene	Markus Hood - Stenungsund	Ethane, for Borealis	Navigator
2016	Gaschem Beluga	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services
2016	Gaschem Orca	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services

For more information please visit http://small-lng.com
*Includes multi-gas, ethylene and LNG bunker ships with 40,000 cubic metres LNG cargo capacity or less
TBN = To Be Nominated indicates ships are still at construction/planning stage
** = project shelved † =Data to be verified Data last updated = 12th February 2018

Small-LNG.com

Built	Name	CBM	Cargo Type	Trading area	Trading in LNG?	Ship Owner / Operator
2016	Ocean Yield TBN**	36,000	Ethane/Ethylene	US - Teeside	Ethane, for Sabic	Gaschem Services
2017	Cardissa	6,500	LNG	Northwest Europe	Yes	Shell
2017	Yuan He 1	30,000	LNG	China	Yes	CSR
2017	ENGIE Zeebrugge	5,000	LNG	Northwest Europe	Yes	NYK
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	CME TBN†	2,200	LNG	US Coast	Yes	CME
2017	Coral EnergICE	18,000	LNG	Northwest Europe/Baltics	Yes	Anthony Veder
2017	Coralius	5,800	LNG	Northwest Europe/Baltics	Yes, for Skangas	Anthony Veder
2017	JS Ineos Invention	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	JS Ineos Intuition	27,500	LNG/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	LNG-Gorskaya TBN	7,300	LNG	Russia	Yes	LNG-Gorskaya
2017	Navigator Eclipse	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Navigator Nova	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Navigator Prominence	35,000	Ethane/Ethylene	US	Ethane	Navigator
2017	Oizmendi	600	LNG	Bilbao	Yes	Itsas Gas
2018	Shell Bunker Barge TBN 2	6,500	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 3	6,500	LNG	Northwest Europe	Yes	Shell
2018	Shell Bunker Barge TBN 4	3,000	LNG	Northwest Europe	Yes	Shell
2018	Bernhard Schulte TBN	7,500	LNG	Baltic	Yes	Bernhard Schulte
2018	CME TBN†	2,200	LNG	US Coast	Yes	CME
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2018	Evergas TBN	32,000	Ethane/Ethylene	Markus Hook - Rafnes	Ethane, for Ineos	Evergas
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line
2019	KLine TBN	7,500	LNG	Korea	Yes	Korea Line
2019	Stolt TBN	7,500	LNG	Mediterranean	Yes	Stolt-Nielsen Gas
2019	Stolt TBN	7,500	LNG	Mediterranean	Yes	Stolt-Nielsen Gas
2020	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas
2020	Shell Bunker Barge	4,000	LNG	US Coast	Yes	Q-LNG Transport / Harvey Gulf
2020	Total TBN	18,600	LNG	NWE	Yes	MOL
2021	Stolt TBN (option)	7,500	LNG		Yes	Stolt-Nielsen Gas

For more information please visit http://small-lng.com
*Includes multi-gas, ethylene and LNG bunker ships with 40,000 cubic metres LNG cargo capacity or less
TBN = To Be Nominated indicates ships are still at construction/planning stage
** = project shelved † =Data to be verified Data last updated = 12th February 2018

Small-LNG.com