

Texas LNG Brownsville plan moves forward after channel site cleared

US Coast Guard issued a recommendation to FERC on suitability of liquefaction plant access
LNG Journal editor

Texas LNG Brownsville, the liquefaction and export plant proposed for the Gulf Coast, said the US Coast Guard issued a recommendation to the US Federal Energy Regulatory Commission confirming the suitability of the Brownsville Ship Channel for the facility's marine traffic in terms of safety and security.

Texas LNG is an independent, Houston-based export company founded by two international and US oil and gas industry veterans, Vivek Chandra who is Chief Executive, and Langtry Meyer who holds the post of Chief Operating Officer.

Location

Regulators, led by FERC, are considering the plans by the company to construct a liquefaction plant on a 625-acre site located at the South Texas Port of Brownsville's deepwater ship channel.

The plant will enable the export of 4 million tonnes per annum of LNG to established and developing markets using abundant nearby pipeline feed-gas resources.

Texas LNG said full FERC approval and a final investment decision for the development of the liquefaction project in Brownsville are expected in 2019.

The first phase of production of 2 MTPA of LNG is expected to begin in 2023.

Texas LNG said it had secured long-term offtake term sheets from LNG buyers in China, South-



Entrance to Brownsville Ship Channel from Gulf of Mexico

east Asia and Europe, and is planning to begin pre-FID detailed engineering in 2018 upon closing of its current funding round.

In its review of Texas LNG's suitability, the Coast Guard addressed public comments that raised a number of issues, including safety, security, potential environmental impacts, economics and the physical characteristics of the ship channel.

In addition, the Coast Guard considered not only Texas LNG's expected carrier traffic, but also recognized other traffic transiting through the Channel, including offshore rigs, aircraft carriers, fishing vessels, recreational vessels and traffic from other proposed LNG projects.

"The Coast Guard concluded that the waterway is suitable to handle current and anticipated incremental traffic from the Texas LNG facility," said Texas LNG.

The plant and export terminal will be designed to accommodate LNG carriers with capacities of up to 180,000 cubic metres.

The Brownsville Ship Channel has a current depth of 42 feet

(12.8 metres), with full US Congressional authorization to deepen the channel to 52 feet (15.8 metres).

The total inbound transit from the Gulf of Mexico sea buoy (pilot boarding area) to the future Texas LNG terminal berth is approximately seven miles (11km).

"This is a notable advantage over most other proposed US LNG projects in Texas, as well those in Louisiana, where transit distances can be significantly longer," the company said.

Partners

Texas LNG has already signed up other project participants, including leading technical, commercial, financial and legal experts.

These include plant builders, South Korea's Samsung Engineering and KBR of the US and LNG equipment-maker and Air Products.

Samsung Engineering is also a minority equity owner in Texas LNG and strategic partner (with KBR) responsible for all engineering, construction and procurement.

UNLIMITED AGENDA

DEVELOPMENT

Sempra still plans to transform Costa Azul terminal to handle exports

2

FINANCING

Canadian project in Nova Scotia hires banks for project finance

3

IMPORTS

January cargoes for China rise to record levels from Australia

5

UPSTREAM

Gladstone LNG to make major investment in CSG resources

6

STORAGE

Singapore LNG terminal to open fourth storage tank to expand

7

INVESTMENT



ExxonMobil plans LNG investments to help meet Asian demand

8

Sempra Energy still plans to transform Costa Azul terminal for exports like Cameron LNG

LNG Journal editor

Sempra Energy, the California-based utility transforming the US Cameron LNG terminal in Louisiana into an export plant, is still planning a Mexican LNG export venture with national Petroleos Mexicano (Pemex) first studied three years ago.

Sempra is proposing the project through its IEnova infrastructure subsidiary operating in Mexico, and whose senior executives confirmed the plans were still on when they recently presented IEnova's annual results.

Transforming

The Mexican export plant would be a transformation venture using the existing Energia Costa Azul LNG import terminal completed in 2008 on the Pacific Coast of Mexico.

San Diego-based Sempra constructed the terminal to receive imports from Asian LNG producer Indonesia and its Tangguh export project, operated by BP of the UK, when the US still required LNG



The Costa Azul import terminal in Ensenada in Mexico

imports before the shale-gas boom.

Now Sempra and Pemex are again pursuing the Mexican export plan at Costa Azul.

"We received the three major Mexican permits that are required and we are moving forward with discussions to better understand demand and size the project appropriately," said IEnova Vice President Tania Ortiz Mena.

"We expect to make substantial progress on defining the project throughout this year," stated Ortiz Mena during a results presentation.

The Sempra subsidiary signed an agreement with its Costa Azul partner Pemex in 2015 to begin developing a liquefaction facility at the terminal, which is near Ensenada in the northwest Mexican state of Baja California.

Costa Azul when it was completed was the first LNG import terminal to operate on the West Coast of North America and is one of three such facilities in Mexico. The other two are at Manzanillo on the Pacific Coast and Altamira on the Gulf of Mexico.

Manzanillo mainly receives cargoes from Peru LNG and Sabine Pass in the US, while Altamira receives Sabine Pass shipments and cargoes from countries such as Nigeria.

Costa Azul was built to meet demand 10 years ago in both Mexico and the US state of California.

IEnova and Pemex said they were now looking to reconfigure Costa Azul to export LNG to markets in Asia and South America.

Mexico is a net natural gas importer from the US and the biggest regional customer for LNG. The Mexicans are promoting the idea of using pipeline gas from the US and liquefying it at Costa Azul for export.

The terminal is isolated from Mexico's main gas pipeline network and only has a feeder gas line to other inter-connections.

However, the nearby Rosarito pipeline links directly to two border-crossing points and indirectly to a third with inter-connections with pipelines near San Diego.

US Commonwealth LNG venture proposed for Cameron Parish makes regulatory advance

Commonwealth LNG, the US proposed LNG export plant for the west side of the Calcasieu Ship Channel near Johnson Bayou in Louisiana Cameron Parish has been the subject of a notice of intention from the US Federal Energy Regulatory Commission FERC to prepare an environmental impact statement.

The liquefaction facility would have a peak production capacity of 9 million metric tonnes of LNG per year.

"The Commission will use this EIS in its decision-making process to determine whether the project is in the public interest," said the FERC notice.

"This notice announces the opening of the scoping process the Commission will use to gather input from the public and inter-

ested agencies," it added. The Commonwealth project would consist of eight separate sets of facilities, including a 3.7-mile-long natural gas receiving pipeline, extending from existing pipelines operated by Kinetica Partners and Bridgeline Holdings.

There would also be four gas pre-treatment units and eight liquefaction trains, each with a nominal LNG production capacity of around 1 MTPA.

There would additionally be six LNG storage tanks, each with a capacity of 40,000 cubic metres.

The adjacent electric plant would be powered by an 80-megawatt gas turbine and there would be boil-off gas handling systems, utilities, and communications system.

The marine berth would have the size to accommodate LNG carriers with capacity up to 215,000 cubic metres.

The FERC explained that members of the public and interested parties could make a difference by providing specific comments or concerns about the venture.

"Your comments should focus on the potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental impacts," said the FERC.

"Individual verbal comments will be taken on a one-on-one basis with a court reporter. This format is designed to receive the maximum amount of verbal comments, in a convenient way during the timeframe allotted," added the Commission.

The Commonwealth project developers announced in January 2018 that the Japanese bank Sumitomo Mitsui Banking Corp. would act as its financial advisor to help raise capital and advance the venture.

Commonwealth LNG President and Chief Executive Paul Varello said the company was ready to move forward with its innovative LNG investment.

"SMBC's experience and reputation in capital asset advice and management will help ensure the stability and predictability of our development project in southwest Louisiana," said Varello.

The Commonwealth venture is aiming for construction to begin as early as 2019, with operations to commence by 2022.

Magnolia LNG will move to construction once deal done

Australia-listed LNG Ltd said it was in a strong competitive position in the mid-scale industry with two North American projects close to construction, Magnolia LNG in Louisiana and Bear Head LNG in the Canadian province of Nova Scotia, and key decisions could be expected in 2018.

"The Magnolia LNG project enters 2018 shovel ready and first in-line to satisfy demand for new LNG supply," said the company in its earnings with losses widening by 2 percent to \$13.60 million from \$13.31M.

It said earnings reflected the company's liquidity management plan and sole focus on completing the marketing of Magnolia LNG's offtake capacity.

"Administration expenditure decreased from \$6.4M (2016) to \$5.0M, reflecting full initiation of the company's cost-reduction program," it stated.

"Our team is solely focused on completing our marketing of Magnolia LNG's offtake capacity in order to take a financial investment decision," LNG Ltd said.

"The project has all required US Federal Energy Regulatory Commission and US Department of Energy permits and approvals, has construction price certainty through its industry competitive LSTK engineering, procurement, and construction contract price," it added.

Magnolia has a contract with US energy engineers KBR and South Korea's SK Engineering & Construction.

The company additionally noted that it had "certainty of gas supply" and equity via a commitment from Stonepeak Infrastructure Partners, as well as debt financing to be led by French bank BNP Paribas.

Canadian Atlantic Coast project hires banks to raise US\$10 billion

LNG Journal editor

Pieridae Energy, the Canadian company developing the Goldboro LNG project in the Atlantic Coast province of Nova Scotia, has retained bankers to raise US\$10 billion in equity and project financing.

Pieridae said it had engaged US investment bank Morgan Stanley & Co and a subsidiary of French bank Societe Generale, SG Americas Securities, to serve as financial advisors for the Goldboro venture.

Progress

"We are extremely proud to have partnered up with such prestigious organisations as Morgan Stanley and Societe Generale," said Alfred Sorensen, Chief Executive of Pieridae.

"The project is a testament to the creditability of Pieridae Energy's progress to date," added Sorensen.

The Goldboro LNG project proposes to build an LNG processing facility, storage tanks, a power plant and marine jetties in Guysborough, Nova Scotia.



Goldboro LNG project planned for province of Nova Scotia

Pieridae has ratified labour agreements to secure tradesmen for the building of the Goldboro plant to produce 10 million tonnes per annum of LNG.

The Canadian company has also signed a deal with German utility and energy company Uniper for 50 percent of Goldboro's initial capacity pursuant to a 20-year, take-or-pay contract.

The Goldboro facility will be located at the Goldboro Industrial Park after the company earlier ac-

quired 265 acres of land from the municipality of the District of Guysborough.

Goldboro will also have at least two full containment LNG storage tanks, each with a capacity of up to 230,000 cubic metres and the facility is expected to enter production by 2022.

Another LNG export project in Nova Scotia is the Bear Head venture being developed by LNG Ltd of Australia.

Canadian energy company Pembina makes progress on US Jordan Cove

Pembina Pipeline Corp., the Canadian energy infrastructure company, said it was making progress with a range of natural gas projects in North America, including the Jordan Cove LNG export plant planned for the northwest US state of Oregon.

Pembina gave its latest project updates as it posted fourth-quarter and full-year earnings of C\$445 million (US\$350M) and C\$891M, which were respectively 240 percent and 91 percent higher than in the previous year.

Pembina closed its acquisition in October 2017 of Canadian company Veresen Inc., inheriting the

US Jordan Cove LNG project and is pushing ahead with it. Veresen operations contributed \$214M in operating margin in the fourth quarter.

"Pembina continues to progress its proposed Jordan Cove liquefied natural gas export terminal and related natural gas pipeline project," the company said in its earnings statement.

"Pembina has committed a 2018 capital budget of C\$135M to progress Jordan Cove to a final investment decision, pending the receipt of the necessary regulatory approvals and other requirements," it added.

Jordan Cove officially filed its

application with the US Federal Energy Regulatory Commission in September 2017 with the company expecting an outcome during the second half of 2018.

Jordan Cove if approved would be constructed at Coos Bay in Oregon to produce 7.8 million tonnes per annum of LNG for export to Asian markets.

The plant would be the only LNG export facility on the US West Coast and proposals include the related Pacific Connector Gas Pipeline to transport natural gas from the Malin Hub in southern Oregon to the Coos Bay export plant.

THE EXCLUSIVE MEETING PLACE FOR LNG & GAS BUYERS & SELLERS IN CHINA

PRODUCED BY



FROM THE PRODUCERS OF



CWC 4TH CHINA LNG & GAS INTERNATIONAL SUMMIT & EXHIBITION

25 - 26 APRIL 2018 | BEIJING, CHINA



Zhang Yuqing
Former Deputy
Director General
National Energy
Administration



Zhang Rongwang
President, Trading &
Marketing Branch
CNOOC
Gas and Power Group



Li Yalan
Chairperson of the
Board of Directors
Beijing Gas
Group Co., Ltd



Wang Zhehong
Deputy General Manager
Shenergy (Group) Co., Ltd
& Chairman
Shanghai Gas (Group) Co., Ltd



Liu Jingbo
Deputy General Manager
Guangzhou Gas Group



Zhu Xingshan
Senior Director,
Planning Department
CNPC



Jun Nishizawa
Senior Vice President, Division COO
Energy Resources Division B
Mitsubishi Corporation



Andrew Walker
VP Strategy
Cheniere Marketing Ltd



Tom Earl
Chief Commercial Officer
Venture Global



Mabel Leung
President
China Natural Gas Marketing
ExxonMobil (China)
Investment Co., Ltd.

OFFICIAL SUPPORTERS



PLATINUM SPONSOR



NEXTDECADE
A Portfolio LNG Company

GOLD SPONSOR

VENTURE GLOBAL LNG

SILVER SPONSORS

ExxonMobil

TELLURIAN

BRONZE SPONSORS



CHENIERE



中国寰球工程有限公司
CHINA HUANQIU CONTRACTING & ENGINEERING CO., LTD.



三菱商事



S&P Global
Platts



HØEGH LNG

Exclusive for LNG Journal readers - wishing you a Happy Chinese New Year
Book now using code LNGJournalAd10 for 10% off

Contact Elliott McGinn or Tyler Forbes on +44 20 7978 0000 or email ChinaLNG@thecwcgroup.com

CHINALNGSUMMIT.COM



#ChinaLNG

NEWS NUDGES

FERC clears gas shippers

A US Federal Energy Regulatory Commission inquiry has revealed no evidence of anti-competitive withholding of natural gas pipeline capacity on the Algonquin Gas Transmission pipeline by New England shippers. The Commission said it would take no further action on the matter. "The inquiry arose out of allegations made by the Environmental Defense Fund in an August 2017 white paper, which asserted that local gas distribution companies in New England had engaged in practices to withhold pipeline capacity on the Algonquin system to drive up prices in the region," FERC explained. "Commission staff took these allegations very seriously and conducted an extensive review of both publicly available and non-public data."

Spanish gas for France

Spain has been supplying additional supplies of natural gas to France through pipeline interconnections between the two countries during the current cold snap sweeping Europe. Spanish network operator Enagás, which itself receives natural gas in the form of pipelines imports from North Africa and LNG shipments, said its supplies to France come at a time when there is a low level of storage in Europe due to recent demand.

Flex LNG earnings

Flex LNG, the Norwegian company whose shareholders include a fund controlled by shipping magnate John Fredriksen, reported fourth-quarter revenues of \$7.9 million compared with \$9.8M in the previous quarter.

Chinese LNG imports hit record levels helped by Australia surge

LNG Journal editor

China imported a record amount of LNG in January, breaking the previous record set in December, as cold winter weather set in and natural gas replaced coal and coke in northern cities under a state campaign to reduce air pollution.

Chinese LNG imports in January rose 51.1 percent compared with the same month last year.

Customs data

Shipments last month amounted to 5.18 million tonnes compared with 3.43MT in January 2017, according to figures from the General Administration of Customs.

Imports of LNG in December had risen by 34.8 percent to their previous monthly record of 5.03MT compared with the 3.73MT logged in December 2016.

The LNG shipments to China's network of 16 import facilities for all of 2017 were up 46.3 percent compared with the previous year to 38.13MT, also a record.

The Customs data as well as shipping information showed that cargoes arrived from many LNG



PetroChina import and regas facility at Tangshan

producing nations, including Australia, Qatar, the US, Indonesia and African countries such as Angola.

The LNG surge was spurred by a government-led campaign aimed at ending winter air pollution in 30 northern cities and suppliers pointed their cargoes at China in December and January because of higher prices.

Chinese overall natural gas imports in the form of pipeline supplies from the Central Asian republics of the former Soviet Union and LNG shipments amounted to a combined 7.70MT last month, about 33 percent higher than a year ago.

Among the African LNG ship-

ments, the 160,500 cubic metres capacity vessel "Sonangol Benguela" delivered a cargo on January 3 to the Zhuhai terminal, operated by China National Offshore Oil Corp. in the southeast province of Guangdong, from Angola LNG in southwest Africa.

Shipments also rose from Australia's increased LNG production.

For example, the 174,400 cubic metres capacity carrier "Cesi Gladstone" unloaded a shipment on January 7 at the Tangshan import facility in the northern Hebei province from the Gladstone export plant in the east Australian state of Queensland.

Novatek confirms Saudi Aramco interest in joining Arctic LNG-2

Novatek, the main shareholder in the Yamal LNG export project in Siberia and one of Russia's largest natural gas producers, confirmed that Saudi Arabia's energy company, Saudi Aramco, was interested in joining its Arctic LNG-2 export project as a partner.

"We see high prospects of mutually beneficial strategic partnership with Saudi Arabia," said Novatek Chairman Chief Executive Leonid Mikhelson.

"Our company has reserves of natural gas and the unique experience of implementing LNG projects in Arctic Russia."

"Novatek's strategy provides for growth of LNG production at a quick rate with engagement of in-

ternational partners and we welcome interest of such a globally significant company as Saudi Aramco in cooperation on the global gas markets," stated Mikhelson.

The Arctic LNG-2 project is scheduled to begin production in 2023 if construction starts by the end of 2019.

The Novatek statement followed talks in the Saudi capital Riyadh last week between Saudi Arabian Energy Minister Khalid Al-Falih with his Russian counterpart Alexander Novak.

The Saudis have previously said they were considering investing in Novatek's future LNG project in the Arctic region as part of a Saudi

plan to use more domestic gas-fired plants for electricity generation.

Novatek is already working on its second LNG project after Yamal LNG, called the Arctic LNG 2 venture to be located on the Gydan peninsula in Siberia.

Novatek Chairman Leonid Mikhelson had previously said planning would start on the Arctic LNG-2 project once the Yamal LNG project came on stream, which happened three months ago.

The Arctic LNG-2 venture envisages the installation of three gravity-based structures (GBS) in Ob Bay and construction of the LNG plant on these platforms.

Gladstone LNG project partners to make major investment in upstream CSG resources

LNG Journal editor

Gladstone LNG, the coal-seam-gas-to-LNG plant in the eastern Australian state of Queensland, plans to invest A\$900 million (US\$700M) in upstream development to underpin production and exports.

Shareholders in the GLNG plant, including France's Total, Australia's Santos, Malaysian energy company Petronas and Korea Gas Corp. will be providing the funding to tap into new CSG resources.

Inland basins

The GLNG plant receives its feed-gas from the Surat and Bowen Basins of southeast Queensland, via a 420-kilometre underground gas transmission pipeline to serve the two-train liquefaction facility on Curtis Island, near the port of Gladstone.

GLNG has been supplying countries such as China and South Korea since starting commercial operations in October 2015.

LNG plants using CSG from on-shore fields, known as tenements, need supplies from several thousand wells over the lifespan of the liquefaction and export facilities.

"As operator, Santos is focused



Santos-operated liquefaction plant on Curtis Island

on building gas supply by drilling more wells to increase production, seeking opportunities to extract value from our infrastructure and driving efficiencies to operate at lowest cost," said the company.

GLNG is targeting upstream developments in the Maranoa and Western Downs regions of south-west Queensland.

"As well as upstream developments around the Fairview, Scotia and Arcadia fields, this investment includes the first year of funding for the new \$750M Roma East project which will be developed over the next three years," said Santos.

Brett Woods, Vice President of Onshore Upstream activities for Santos, joined the Queensland

Minister for Mines and Energy, Anthony Lynham, at a ceremony to launch the Roma East project, following the drilling of the first of 430 new wells.

"This important project will create up to 400 construction jobs and local business opportunities in the Roma area, helping to sustain and boost the benefits of Santos' and GLNG's earlier investments in the region," said Woods.

"Roma East will also add nearly 50 petajoules a year to gas production in Queensland in 2020, equivalent to about 8 percent of expected East Coast domestic gas demand this year," according to Woods.

"This is great news for both the

domestic gas market and our LNG exports," he added.

Lynham said the investment by Santos and its partners in the Roma East Field would mean jobs, business opportunities, and royalties for Queenslanders as well as more gas supply for the Australian market and for LNG exports.

"We welcome this sign of confidence by Santos in Queensland as an investment destination," added the state minister.

The Roma East project will involve bringing on line another 480 wells including drilling around 430 new wells, connecting existing appraisal wells, and drilling pre-development wells in the surrounding areas.

The project will also include around 420 kilometres of water, gas gathering and other pipelines.

A new water-handling facility for irrigation and over 200 hectares of additional irrigation in the Roma area will improve live-stock carrying capacity for some local landholders.

"Santos and its GLNG partners have already invested almost \$20 billion in regional Queensland since 2011 and this new investment is a huge vote of confidence in the state," said the company.

LNG Journal & Gas to Power Journal Subscription Package

The journals' comprehensive coverage is dedicated to the entire gas-value-chain. In addition to our LNG Journal & Gas to Power Journal Daily newsletters, each platform provides exclusive, accurate and up-to-date news and analysis divided in the following sector-focused publications:



- ➔ LNG Journal - Monthly issues
- ➔ Gas to Power Journal - Daily e-newsletter + PDF
- ➔ Gas Power Tech Quarterly - Quarterly PDF
- ➔ LNG Unlimited - Weekly magazine + PDF
- ➔ LNG Shipping News - Fortnightly e-newspaper + PDF
- ➔ LNG North America - Monthly e-newspaper + PDF
- ➔ LNG Fuelling - Quarterly e-newspaper + PDF

United Kingdom	GBP 750
Europe and Africa	EUR 925
Asia and Americas	USD 1150

**Multiuser options under request **new subscribers only*

For further information on subscribing please contact us at elena@lngjournal.com or + 44 20 7017 3416

PNG LNG plant remains closed after earthquake and tremors

Australian energy company Santos said that natural gas production at the Papua New Guinea LNG's Hides gas conditioning plant and the Kutubu gas facilities in the PNG Highlands was shut down as a precautionary measure, along with the liquefaction plant, following a major earthquake and a series of aftershocks.

The company has been advised by US major ExxonMobil, the operator of the PNG LNG export plant that receives its feed-gas from the Highlands and is located just northwest of the capital Port Moresby, that no staff or contractors have been injured as a result of these seismic events.

"Production will remain shut-down whilst a full assessment of the impact of the earthquake is made," said Santos.

Operator Exxon declined to comment on March 2 on whether it had invoked "force majeure" to temporarily deliver commitments.

Stakeholders later said the production plant could be closed for several weeks.

The earthquake struck on February 26 and was 7.5 in magnitude. Its epicentre was a remote forested region in the Southern Highlands of the nation with a population of around 7 million people.

"The Papua New Guinea Defence Force has been mobilised to assist with the assessment and the delivery of assistance to affected people as well as the restoration of services and infrastructure," said Isaac Lupari, the Chief Secretary to the Government.

The PNG LNG production facility recently logged an annualized output rate of 8.6 million tonnes per annum and mainly supplies Japan, China and Taiwan.

Singapore LNG terminal to open fourth storage tank to expand

LNG Journal editor

Singapore LNG Corp., operator of the city-state's import and re-export facility on Jurong Island, said its fourth storage tank is scheduled to be completed in the next couple of months as the facility broadens its activities as a regional hub.

The fourth tank has even larger capacity than the other three at 260,000 cubic metres and will offer LNG traders more options and flexibility.

Service

The facility currently has three storage tanks in service, each with a capacity of 188,000 cubic metres and 540,000 cubic metres in total.

The terminal is owned by the Singapore Energy Authority and is located on a 40-hectare plot at the southern tip of Jurong Island.

It has been in operation since 2013 and can handle the largest LNG carriers from Qatar.

When it started up it became the first open-access, multi-user



LNG terminal is located at southern tip of Jurong island

LNG regasification terminal in Asia.

Its current services include receiving shipments for Singapore's own energy needs and additionally offering storage and re-loading for exports.

SLNG is also building a fuel bunkering business in cooperation with the Maritime and Port Authority of Singapore.

The terminal works in close cooperation with Pavilion Energy, owned by the Singapore wealth fund Temasek.

Pavilion has rights to access tank capacity on a segregated basis for LNG storage and reloading services.

This supports higher volume of LNG trading activities, small-scale LNG opportunities, LNG breakbulk and vessel cool-down services.

Pavilion is working with industry players to trade LNG indexed to the Sling, the Singapore Exchange's LNG Index Group, to support more trades based on the index.

Hoegh LNG of Norway notes increase in FSRUs new tenders

Hoegh LNG, the Norwegian fleet owner and project developer, said imports through floating storage and regasification units (FSRUs) continued to rise with China, Turkey and Pakistan contributing and there were 13 other global tenders currently pending.

"LNG imports through FSRUs rose 3 percent to 33.5 million tonnes in 2017," said Hoegh as it presented its fourth-quarter earnings.

At the start of 2018 there were 35 countries importing LNG through regasification plants with a capacity greater than 0.5 million tonnes per annum, including 14 countries using FSRUs.

Hoegh said overall tendering activity remained high, and new projects continued to come to

market with requests for interest in providing FSRUs.

"Such projects, which have been mentioned in the public domain and find themselves in various stages of development, include projects in markets such as Australia, Brazil, Colombia, Cote d'Ivoire, Croatia, Cyprus, Hong Kong, Lebanon, Mexico, Pakistan, Turkey, the UAE and the UK," added Hoegh.

The FSRU fleet consisted of 28 units at start of 2018. Of these, five are converted LNG carriers built in the 1970s and 1980s. The FSRU order book stands at 12 units, with delivery dates from April 2018 through 2021.

Hoegh reported fourth-quarter profits after tax of \$19.96 million compared with \$828,000 in the

same three months of the previous year. It also posted record gross earnings of \$43M for the quarter, including \$5.6M in higher revenue recognition following the conclusion of a contractual audit of reimbursable amounts under an existing time charter.

Total revenue for 2017 amounted to \$279.3M versus \$232.9M in 2016. Annual profits came to \$41.05M compared with \$14.01M the previous year.

"So far in 2018 we have delivered 'Hoegh Giant' on a hybrid LNGC/FSRU contract with Gas Natural Fenosa (Spain), which should have a positive effect on our financial performance from the next quarter," said President and Chief Executive Sveinung J.S. Stohle.

ExxonMobil plans more LNG investments in Qatar and elsewhere to meet Asian demand

LNG Journal editor

ExxonMobil, one of the world's leading liquefied natural gas producers with a stake in more than 62 million tonnes of the 77MT of LNG produced annually by Qatar, is planning more investment in the Gulf state and has production plans elsewhere from Mozambique to Papua New Guinea.

The US major's annual report has given more details of its production and investment plans worldwide.

Ventures

"Through our joint ventures with Qatar Petroleum, ExxonMobil's net acreage totaled 65 thousand acres offshore," said ExxonMobil of the North Field in the Persian Gulf from where Qatar plans to expand future LNG output to 100 million tonnes per annum.

ExxonMobil said it participated in 62.2MT of gross LNG capacity and 2.0 billion cubic feet per day of flowing gas capacity at the end of 2017.



Carriers lifting cargoes at Ras Laffan complex in Qatar

At the same time ExxonMobil has noted that there were concerns about the lack of new LNG project approvals over the past two years even as many ventures were cancelled for economic or regulatory reasons.

"At year-end 2017, approximately 7.3 billion oil-equivalent barrels (GOEB) of ExxonMobil's proved reserves were classified as proved undeveloped," ExxonMobil said of its worldwide position.

"This represents 34 percent of the 21.2 GOEB reported in proved reserves. This compares to the 6.2 GOEB of proved undeveloped reserves reported at the end of

2016," it added. "During the year, ExxonMobil conducted development activities that resulted in the transfer of approximately 0.7 GOEB from proved undeveloped to proved and developed reserves by year end," it said.

The ExxonMobil LNG activities included consolidation of the development of the Gorgon project on Barrow Island offshore Western Australia.

"The largest transfers were related to the start-up of the Gorgon field and Longford Gas Conditioning Plant in Australia and drilling activity in the United States, the United Arab Emirates

and Kazakhstan," it said. ExxonMobil noted that the third Train of the Chevron-operated Gorgon project started up in 2017, taking output to 15.6 MTPA and 280 million cubic feet per day at a domestic gas plant located on Barrow Island.

"Also, purchases, primarily in the United States and Mozambique, resulted in the addition of approximately 0.9 GOEB of proved undeveloped reserves," it added.

In December 2017, Italian energy company Eni completed its sale to ExxonMobil of a 25 percent interest for an initial \$2.8Bln in the Area 4 licence block in the Rovuma Basin of Mozambique.

Under the agreement, ExxonMobil will run all other ventures after the first floating LNG project is completed in the Coral South field.

The shuffling of the Mozambique shareholdings now gives Eni 35.7 percent, ExxonMobil 35.7 percent and China National Petroleum Corp. 28.6 percent.

APA Group of Australia signs pipeline deal for Queensland-to-south markets amid LNG plans

APA Group, Australia's leading energy infrastructure business with natural gas pipelines spanning every Australian state, said it had entered into a new agreement for gas transportation and storage services from Queensland to southern markets amid plans by several other companies to set up LNG regasification terminals to re-distribute supplies.

"This is the 16th contract entered into by APA in the East Coast market since 1 August 2017 and I am very pleased to see this agreement come together and facilitate the flow of more gas into the East Coast domestic market," said APA's Managing Director Mick McCormack.

"We work very closely with our customers as our interests are aligned to their requirements. The

gas industry is focused on delivering affordable and reliable gas to end users," stated McCormack.

"This type of deal is a prime example of the energy industry working together and responding to market conditions.

"The flexibility provided by APA's interconnected grid and service offerings allows the industry to provide cost effective solutions for Australia's energy challenges," the MD added.

APA said it would earn total revenues of around A\$40 million (US\$31M) over the contracted period of three years from 2018.

APA's latest pipeline deal from Queensland to the South comes as a consortium including two Japanese companies said they were planning an LNG regasifica-

tion terminal near Sydney in New South Wales.

Japanese companies Marubeni Corp. and Jera Co. Inc. have joined an Australian investment and energy company, the Minderoo Group and its Squadron Energy subsidiary, to propose the plan.

Minderoo is controlled by Australian billionaire Andrew Forrest and includes a one-third stake in Australian iron ore exporter Fortescue Metals.

Marubeni, Jera and Squadron have signed a memorandum of understanding to conduct a joint feasibility study regarding establishing the terminal and gas supply in New South Wales.

Another Australian company AGL Energy has sought LNG supply proposals for its import terminal

project in the southeast Australian state of Victoria.

AGL has chosen Crib Point at Western Port in Victoria as the preferred site for its regasification terminal and import jetty with an affiliated pipeline.

Australia has huge reserves of natural gas that it exports from the states of Western Australia and Queensland and is on track to become the largest LNG exporter, overtaking Qatar by 2019.

However, domestic supplies for the East Coast natural gas market, including parts of Queensland, South Australia, New South Wales and Victoria has become a political issue in the country because of rising prices and warnings of future shortages.

Building the Energy Future through LNG



Chart LNG solutions are facilitating the use of natural gas as a safe, economical, clean-burning fuel alternative to diesel and other distillates for energy, transportation and industry.

www.ChartLNG.com
LNG@ChartIndustries.com

CHART
Innovation. Experience. Performance.®