

UK terminal offers flexible LNG capacity to main market players

Legally binding bids from the market players are awaited by 10th of March 2020
LNG Journal editor

The UK Isle of Grain LNG import terminal southeast of London, owned by National Grid plc, has launched an open season process for customers interested in buying capacity at its storage facilities.

Grain LNG, located on the Medway River about 45 miles south-east of London, is seeking industry feedback on a new service proposal during an initial consultation phase between now (1 Nov 2019) and 10 January 2020 for capacity available from 2025.

Invitation

"The market is invited to place legally binding bids for the capacity by 10 March 2020, and Grain LNG is expecting to allocate capacity by the end of March 2020," said the company.

The Grain LNG terminal was commissioned in 2005. National Grid also operates the natural gas National Transmission System in the UK with day-to-day responsibility for balancing supply and demand through a network comprising 7,660 kilometres (4,760 miles) of high-pressure pipelines and 618 above-ground installations.

"The open season offers market participants a brand-new capacity opportunity, following the expiry of the long-term contracts that underpinned the original construction and development of the Grain LNG terminal," it explained.

The National Grid subsidiary said capacity on offer would be a mix of existing and new-build infrastructure, and could increase



Isle of Grain facility southeast of London started in 2005

Grain LNG's total site storage to 1,200,300 cubic metres and total regasification capacity to 780 gigawatt hours per day, equivalent to more than 30 percent of UK gas demand.

"By optimizing existing assets, Grain LNG expects to be able to offer market participants flexible and competitively-priced capacity," said the terminal operator.

Positive feedback to a recent "Expression of Interest" exercise enabled Grain LNG to create two distinct service types.

The first is a "Base User" service which is designed for parties looking to take a significant undertaking in the terminal, with the flexibility to store and send-out as required. The "Base User" will be entitled to 48 berthing slots, 200,000 cubic metres of working storage and a regasification capacity of 140 GWh/d, throughout a 15-year to 25-year contract.

The second service available is a "Package User" service, which offers customers a series of 10-day "packages", entitling parties to berth, unload, store and send out LNG with no minimum send-out obligation.

The "Package User" service includes from nine to 18 or 27

berthing slots per year, working storage of up to 180,000 cubic metres and 120 GWh/d for a period of 10 days. The "Package User" will have maximum optionality in deciding when to bring cargoes to the UK.

"We're really pleased with the high level of interest shown by the market. It has allowed us to engage with potential customers and shape our offering to best meet their needs, whilst optimising access to this strategic asset," said Nicola Duffin, Grain LNG's Head of Commercial.

"This is an exciting time for Grain LNG, as we prepare to offer capacity that will allow customers to secure long-term access to the National Balancing Point," added Duffin.

"Grain LNG will continue to provide a reliable service to our current capacity holders and play a key role in ensuring gas security of supply for the UK," she stated.

Rules

Grain could also benefit from proposed changes to the gas specification rules in the UK if they go ahead. These would significantly reduce variable costs for LNG shippers.

UNLIMITED AGENDA

LIQUEFACTION

France's Total may double capacity at plant in Mozambique

2

FUEL MARKET

ABS calls in China speech for LNG to lead way in bunkering

3

EXPORTS

Pembina is still pursuing LNG plans at Coos Bay in Oregon

5

INDUSTRY



LNG market's founder firms celebrate first US-Japan deal

6

SUPPLIES

India considers spin-off moves for pipelines held by GAIL

7

CORPORATE

Sempra strategy based on LNG expansion and sorting out utilities

9

France's Total considers doubling of capacity at Mozambique Pemba plant to four Trains

LNG Journal editor

French energy major Total said it planned to expand its Mozambique liquefied natural gas project with up to two additional processing Trains, taking the total up to four Trains.

Total had previously said the Mozambique plant would consist of two liquefaction Trains with capacity of 12.9 MTPA. With two more Trains nameplate production could now rise to 25.8 MTPA.

Studies

"We're starting to look at studies for Train 3 and Train 4, because the resources are clearly there to develop," said Total Exploration and Production division executive Mike Sangster at an energy conference in Cape Town, South Africa.

Total confirmed in October 2019 that it paid \$3.9 billion to close the acquisition of Anadarko Petroleum's 26.5 percent operated interest in the Mozambique LNG project from Anadarko purchaser



Feed-gas will come from offshore Area 1 of the offshore Rovuma Basin

Occidental Petroleum. Total had previously reached a binding agreement with Occidental to buy Anadarko's assets in Africa, including Mozambique, Algeria, Ghana and South Africa.

Sangster added that the company expected to close its acquisition of Anadarko's Ghanaian and Algerian assets early in 2020 once regulatory approvals were received.

Patrick Pouyanné, Chairman and Chief Executive of Total, has said that Mozambique LNG was a one-of-a-kind asset that perfectly fitted with the company strategy.

Total plans to work on the strong foundations established by the previous operator Anadarko and its partners.

The project includes the development of the Golfinho and Atum fields located within offshore Area 1 of the Rovuma Basin. The plant site has already been cleared near the coastal town of Pemba in northeast Cabo Delgado province.

Rovuma Area 1 contains more than 60 trillion cubic feet of gas resources of which 36 Tcf could be developed for a four-Train plant.

The Total-led venture is Mozambique's first onshore LNG plant. Italian energy company Eni is leading a project for the Coral South floating LNG project from Area 4 resources in the Rovuma Basin. It is also planning an on-shore venture with ExxonMobil and other stakeholders.

The final investment decision on Total's Mozambique LNG was announced on the 18th June 2019 and the project is expected to come into production by 2024.

Mozambique LNG is largely de-risked since almost 90 percent of the production is already sold through long-term contracts with key LNG buyers in Asia and in Europe.

Additionally, Total's project is expected to have a domestic gas component for in-country consumption to help fuel future economic development.

The Area 1 shareholder line-up is now as follows: Total operates Mozambique LNG with a 26.5 percent participating interest alongside Mozambican state-owned energy company ENH (15 percent). Japan's Mitsui owns 20 percent, India's ONGC Videsh, Bharat PetroResources and Beas Rovuma Energy each hold 10 percent and Thailand's PTTEP 8.5 percent.

Indonesian Abadi LNG solves final problem with project site now chosen in Tanimbar Islands

Inpex Corp. of Japan and Royal Dutch Shell now have a firm decision from the Indonesian government on the location for their onshore liquefied natural gas plant using feed-gas from the Abadi gas field in the Masela Block in the Arafura Sea offshore Indonesia.

The liquefaction and export plant will be constructed on Yamdena Island and is expected to be operational by around 2027 with Inpex already completing preliminary front-end engineering design for a facility with an annual initial capacity of 9.5 million tonnes.

Indonesia's state oil and gas regulator, the Upstream Oil and Gas Regulatory Special Task Force (SKK Migas), said it had sent a formal recommendation letter to the Maluku provincial administration

asking to have the liquefaction plant on Yamdena Island.

"The Maluku provincial administration is very supportive of this Masela gas and LNG project," said SKK Migas.

The Indonesians had earlier proposed that a 370-mile pipeline should be built to connect the Abadi gas field resources to a liquefaction plant on Indonesia's Aru Island, while Inpex had preferred a location in the southeast Asian nation's Tanimbar Islands.

Analysts said that Inpex seemed to have had its way as Yamdena Island is the largest of the Tanimbar Islands chain.

The original Inpex plan for the Abadi project with partner Shell was to produce LNG from a floating production hull, similar to the

Prelude FLNG project offshore northwest Australia that shipped its first LNG cargo in June 2019.

The Indonesians approved the application for a seven-year additional time allocation earlier in 2019 and a 20-year extension to the Production Sharing Contract (PSC) for the Masela Block, extending the term of the PSC until 2055.

Inpex and SKK Migas initially planned to finish development of the block by 2018 but disagreements related to the block's development plan, including whether the LNG plant should be built onshore or offshore, pushed back the deadline to 2027.

Inpex and Shell will be finalizing a marketing plan in 2020 and will also be considering supply

accord for the Indonesian state-run domestic natural and electricity companies, Perusahaan Gas Negara and Perusahaan Listrik Negara.

Takayuki Ueda, President and Chief Executive of Inpex, has said that while the project's development concept has been changed from an FLNG project to an on-shore plant he was confident that the economics of the project are now sufficiently strong for both Inpex and Shell, given that the Production Sharing Contract term has been extended to 2055 and the financial conditions secured.

Inpex would continue to work closely with its partners to begin the necessary preparations for front-end engineering and design.

East Med gas pipeline capacity deal completed

Delek Group of Israel and Noble Energy of the US have completed their acquisition of a stake and reverse capacity on the East Mediterranean Gas (EMG) pipeline from Arish in Egypt's Sinai Peninsula to Askelon in Israel as part of an agreement to supply Dolphinus Holdings of Egypt from the Israeli Leviathan natural gas field.

The Israeli and US partners in the Leviathan and Tamar natural gas fields in the East Mediterranean offshore Israel recently agreed to double the volumes of their deal for sales to Dolphinus and extended the contract terms.

Noble is based in Houston, Texas, has Delek as its partner in the operating Tamar field and the Leviathan project, which is set to come on stream by year-end.

Delek said the partnership had now completed their agreements for the purchase of the shares in the East Mediterranean Gas Company, which owns the EMG Pipeline, and for the transport of natural gas from Israel to Egypt.

"In the partnership's estimation, the EMG Pipeline and the Egyptian transmission system will be fit for the commercial transport of gas on the date of commencement of the obligation of the Leviathan partners to supply natural gas under the gas supply agreement to Dolphinus," stated Delek.

Noble and Delek have also considered using some Leviathan natural gas volumes from the 22 trillion cubic feet of reserves for a floating LNG production venture offshore Israel as well as supplying customers in Egypt and Jordan.

ABS calls in China speech for LNG to lead way in bunkering

LNG Journal editor

American Bureau of Shipping Chairman and Chief Executive Christopher J. Wiernicki gave the US view on the future of the marine fuels market and the use of more liquefied natural gas from 2020 onwards in a major speech at a shipping event in China.

Wiernicki spoke at the 15th annual World Shipping Summit which took place in Shanghai on the sidelines of the China International Import Expo in the Chinese city, one of the world's largest trade fairs, attracting 3,000 companies from 150 countries and including major shipping and logistics companies.

Advances

"Technology advances of the next decade may entirely change our view of the future, but based on what we see today we can identify three developmental pathways for future fuels distinguished by the onboard technologies they require," said Wiernicki.

"These are: the LNG or light



Wiernicki: 'Future fuel will be LNG coupled with technology'

gas pathway, the bio-synthetic pathway and the alcohol and heavy gas pathway," explained the head of the US maritime classification society.

"Within each of these pathways are many variables related to energy content, the state of storage or containment technology, and the overall maturity of the fuel's technology," he added.

He said ABS analysis indicated that reaching International Maritime Organization and global emission reduction targets after 2020 with the sulphur cap on shipping fuel and then 2030 will re-

quire LNG coupled with advances in technology.

"The reduction targets by 2030 are challenging but we know today's technology can get us there if we basically focus on LNG as a fuel, speed optimization and more efficient utilization of the voyage," stated Wiernicki.

"But if we are going to reach 2050 goals, much of the new capacity going into 2030 is going to have to be zero carbon," he said.

He suggested there may not be one dominant fuel of the future, but a range of options tailored to each market sector.

Australian fuel provider expands small-scale liquefaction plant

Evol LNG, the Western Australian provider of liquefied natural gas as a fuel for remote power stations and marine bunkering and a subsidiary of the Australian Wesfarmers Chemicals, Energy & Fertilisers group, said it planned to expand its small-scale Kwinana liquefaction plant.

The plant is designed for the production of 175 tonnes per day using feed gas delivered from the North West Shelf gas fields via the Dampier-to-Bunbury natural gas pipeline.

Evol said that production at the Kwinana facility would now be increased by 40 percent to meet rising demand.

"The move is driven by growing demand from the mining sector to

replace the use of diesel for power generation with a cleaner and more cost-effective natural gas solution," said Evol.

The company is Australia's leading provider of LNG for transport, power generation and industrial applications and is managed within the Kleenheat business of the Wesfarmers group.

The Kwinana LNG plant, constructed in 2008, will increase its capacity to 250 tonnes per day from April 2020, with plans for a further potential expansion to around 300 tonnes per day in 2021.

The newest addition to Evol's growing mining customer base is the Adaman Resources-owned Kirkalocka Gold Mine, located about 70 kilometres south of Mt

Magnet in the mid-West region of Western Australia.

It is anticipated that Adaman Resources would save more than \$2 million per annum and reduce its greenhouse gas emissions by 25 percent by fuelling the mine's power station with LNG instead of diesel.

"The Kirkalocka Gold Mine will soon be powered by a cleaner alternative, thanks to a new agreement between Evol LNG and Adaman Resources," said Evol.

Evol currently has agreements in place with seven mining customers in the Goldfields and Mid-West regions of Western Australia and operates a growing fleet of more than 30 road tankers to service its customers.

THE MEETING PLACE FOR THE WORLD'S LNG LEADERS

PRODUCED BY:



20TH

CWC WORLD LNG SUMMIT & AWARDS EVENING

3 - 6 DECEMBER 2019 | ROME CAVALIERI HOTEL | ROME, ITALY



Masato Sasaki
Director, Oil & Gas Division
**Ministry of Economy,
Trade & Industry (METI), Japan**



Jeong Joon Yu
President & CEO
SK E&S Co., Ltd.



Alaa Abujbara
Chief Commercial
& Shipping Officer
Qatargas



Cristian Signoretti
Chief Gas & LNG Marketing
and Power Officer
Eni S.p.A.



Martin Houston
Vice Chairman
Tellurian Inc.



Steve Hill
Executive Vice President
Shell Energy



Jonty Shepard
Global Head of LNG
BP



Susannah Pierce
Director of Corporate Affairs
LNG Canada

HOST SPONSOR



PLATINUM SPONSORS



Ocean
LNG Limited



GOLD SPONSORS

VENTURE GLOBAL LNG



SILVER SPONSORS



BRONZE SPONSORS



VIEW THE SUMMIT PROGRAMME ONLINE: CWCLNG.COM/WORLIDLNG

For more information on participating, please contact **Tyler Forbes** or **Elliott McGinn**
on +44 20 7979 0000 or email lng@thecwcgroup.com

CWCLNG.COM/WORLIDLNG
#CWCWLNG

NEWS NUDGES

Burckhardt profits jump

Swiss company Burckhardt Compression, whose LNG offerings include its Laby brand of compressors and boil-off gas solutions, reported high order intake and sales for the first half and with operating profit and net profit both sharply higher year-on-year. Fiscal first-half operating income from April to September almost tripled to 16.65 million Swiss francs (\$16.83M) compared with 5.62M francs in the same six months of 2018. Net income rose almost four-fold to 11.75M francs from 2.28M francs in the year-ago period.

GTT accord in China

French LNG storage tank technology company GTT and the major state-owned company Beijing Enterprises Group (BEG) have signed an accord concerning the evaluation of containment technology for onshore storage tanks, through its subsidiary Beijing Gas Group Co. The signing took place during the visit to Beijing of French President Emmanuel Macron for talks with Chinese President Xi Jinping.

NextDecade cuts losses

NextDecade Corp., the developer of the Rio Grande LNG export project in the Port of Brownsville, narrowed its third-quarter net losses to \$6.36 million from \$10.9M in the year ago quarter as it reduced operating expenses. Nine-month losses amounted to \$30.13M versus \$30.63M in the same period of 2018. The Nasdaq-listed company is also pursuing an associated 137-mile Rio Bravo pipeline in south Texas to supply feed-gas and it also has the option to develop a second export plant called the Galveston Bay project on a 994-acre site secured near Texas City. ■

Pembina is still pursuing LNG plans at Coos Bay in Oregon

LNG Journal editor

Pembina Pipeline Corp. of Canada said it was still on track to develop the Jordan Cove LNG export project at Coos Bay in the north-west state of Oregon as it reported an increase in profits while seeking to boost future earnings with the acquisition of a major Canada-US pipeline from Kinder Morgan.

Pembina, based in Calgary, posted an 11 percent increase in third-quarter earnings to C\$370 million (US\$281.4M) compared with C\$334M in the same three months of 2018. Third-quarter revenues came to C\$1.70 billion, down on the year-ago period's C\$2.04Bln.

Processes

"The regulatory processes for the Jordan Cove LNG project are ongoing," stated Pembina.

"Subsequent to the quarter, the Federal Energy Regulatory Commission revised the schedule for issuance of the final Environmental Impact Statement, which is now expected by February 13, 2020," said the company.

Pembina said it was also con-



Plant to be sited on North Spit of Coos Bay in Oregon

tinuing to engage with the Oregon State regulatory authority.

The plant would comprise five small-scale liquefaction Trains each with 1.5 million tonnes per annum of output for a total of 7.8 MTPA.

The Jordan Cove venture's facilities would also include two full-containment LNG storage tanks with total capacity of 320,000 cubic metres, gas treating facilities, an export jetty and access to more than 25 billion cubic feet per day of gas supply from Western Canada and the US Rockies.

"State permits are a critical component of the regulatory process and enable the commercial viability and critical investment to move forward," said Pembina

in its earnings statement.

"The carrying value of the project at September 30, 2019 is C\$324M, including capitalized borrowing costs of \$7 million," it added.

As proposed, the LNG plant would be visited by about 120 LNG carriers per year and Pembina has confirmed signing preliminary supply accords with Jera Co Inc. and Itochu Corp. of Japan.

The US Coast Guard has already issued a Letter of Recommendation indicating that the Coos Bay Federal Navigation Channel would be considered suitable for the LNG marine traffic associated with the project. ■

Tellurian posts loss as talks continue with other investors

Tellurian Inc., the US company developing the Driftwood LNG project and a network of feed-gas pipelines on the Gulf Coast, posted a third-quarter net loss while advancing with sales of LNG and equity interests in the liquefaction venture with several counterparties after signing an accord with Petronet of India.

Tellurian reported a net loss of \$39.6M, or \$0.18 per share, in documents filed with the Nasdaq global exchange.

The company ended the quarter with around \$91.1 million of cash and cash equivalents, about \$133.2M of debts and a balance

sheet consisting of \$394.1M in assets.

The Driftwood plant is proposed for the west bank of the Calcasieu River, south of Lake Charles, and will have output of just more than 26 MTPA when completed in 2023.

This comprises five liquefaction Trains built in two phases and with each having output of 5.25 MTPA.

The liquefaction venture is in addition to the development of three associated pipelines, the Haynesville Global Access, the Permian Global Access as well as the Driftwood inter-connecting feed-gas pipeline. ■

On the regulatory front, Tellurian began the Federal Energy Regulatory Commission pre-filing process for the Permian pipeline.

This is a 625-mile, 42-inch interstate connection proposed to link the Waha Hub for natural gas in West Texas to a point near Lake Charles in Louisiana.

Tellurian noted that during the quarter it signed an accord in September with leading Indian LNG importer Petronet for the purchase of up to 5 MTPA of LNG from Driftwood, concurrent with an equity investment by the New Delhi-based company. ■

LNG industry founder companies celebrate the first US-Japan LNG sales deal and see bright future

LNG Journal editor

A ceremony took place on November 6 at the Negishi LNG terminal in Yokohama City involving the four companies involved in the delivery and unloading 50 years ago of the first cargo shipped to Japan from Alaska onboard the "Polar Alaska" carrier.

The four companies represented at the commemoration were Tokyo Gas, ConocoPhillips, Mitsubishi Corp. and the Tokyo Electric Power Co. (Tepco) owner, JERA Co. as well as invited guests.

Arrangements

The deal for the November 4, 1969, arrival at Negishi had been arranged two years and eight months earlier in March 1967.

Tokyo Electric Power (now JERA) and Tokyo Gas, with Mitsubishi acting as a buyer's agent, signed a Sales and Purchase Agreement with Phillips Petroleum (now ConocoPhillips) and Marathon Oil.

The first cargo departed from the Kenai liquefaction plant in Alaska, where production had begun in June 1969, and arrived at the Negishi facility, which was the joint receiving terminal at the time of the Tepco Minami Yokohama Thermal Power Plant and



Negishi terminal in Yokohama welcomed first cargo in 1969

Tokyo Gas. All four companies said they expected demand for LNG and natural gas to continue expanding worldwide.

"The role of LNG and natural gas is expected to expand further in the next half century, such as in the utilization for gas-fired power plants to complement power supply fluctuations of renewables which are rapidly growing throughout the world," they said.

"Tokyo Gas, Mitsubishi JERA and ConocoPhillips will continue contributing to the further usage of LNG and to the development of the LNG industry by utilizing the experience and knowledge accumulated during the 50 years,"

they added. Takashi Uchida, President of Tokyo Gas, said the utility has been building an LNG value chain and developing and expanding LNG demand in Japan and overseas.

"In order to pave the way for 'the next 50 years' responses to climate change are now being demanded globally and Tokyo Gas will carry on the pioneering spirit that has been passed on since the introduction of LNG," added Uchida.

Takehiko Kakiuchi, President and Chief Executive of Mitsubishi Corp., said his company was proud to have been a pioneer in the LNG business, initially as a buyer's

agent for the first shipment to Japan.

"Since then Mitsubishi has been a developer of LNG projects around the globe. The role of LNG and natural gas is becoming increasingly important as a substitute for coal and oil as well as the complementary source of energy for the renewables," said Kakiuchi.

"Preservation of the global environment and stable energy supply are at the core of our missions. We are determined to play our role in securing stable supply of LNG and creating new demand in emerging markets," added the Mitsubishi CEO.

Bill Bullock, President in the Asia Pacific and the Middle East for ConocoPhillips, congratulated all participants.

"Together Japan and ConocoPhillips pioneered the Asia Pacific LNG market, helping drive economic progress throughout the region," he stated.

"This close relationship endures, as we continue our commitment to safely deliver LNG to the country. We look forward to our continued partnership with Japan, which we see as being a strong, long-term market," he added.

The whole LNG Market at your fingertips

- Increased market visibility through a quick "lowdown of the market" on Monday morning and detailed "bird's eye" view of the past month
- Break-down and illustration of complex LNG trade relations backed by real data to increase feel for the market
- Access to pre-digested primary market data
- Consistent & systematic market perspectives
- Market and fleet overview in one convenient package

LNG Unlimited



www.lngunlimited.com

SCF Group starts move to finance Arctic ships

Russian shipping line SCF Group and a Russian financial institution signed an agreement for lease-financing of the first ship in a series of ice-breaking liquefied natural gas carriers expected to be built to serve the Arctic LNG II project in northern Siberia.

At the same time, SCF Group, which is also known as Sovcomflot, and Yamal LNG operator Novatek signed a long-term time charter agreement for this tanker.

The vessel will be constructed at Zvezda Shipbuilding Complex in the Russian Far East and financed by Russian financial institution Veb.Rf Group. The first carrier and its sister ships will be capable of traversing the Northern Sea Route.

"The newbuild is designed for year-round operations in the challenging ice conditions of the Kara Sea and The Gulf of Ob and will be able to sail independently through ice over two metres thick," said Novatek.

"All the LNG carriers in the new series will be operated under the Russian flag. The Russian Maritime Register of Shipping (RS) will provide technical supervision during the construction of the vessel series," added the company.

Novatek's ice-class operational carrier fleet currently numbers 15 vessels. All the ships delivered so far to Yamal LNG have been built by Daewoo Shipbuilding and Marine Engineering in South Korea and have capacities of between 170,000 cubic metres and 172,600 cubic metres.

Some are owned by other companies and operated by Sovcomflot, such as the "Nikolay Urvantsev", belonging to the Japanese company Mitsui OSK Lines.

India considers spin-off operation for pipeline assets held by GAIL

LNG Journal editor

The Indian government will consider a proposal this month to spin off the natural gas pipeline business owned by state-run Gas Authority of India to give more momentum to the expansion of a city-gas network and connections to existing and planned LNG import terminals.

GAIL itself is a major LNG market participant with a tolling agreement at the US Cove Point plant in Maryland and regasification capacity at Indian terminals.

Imports

Ministers are considering offering the pipeline business owned by GAIL, which is India's biggest natural gas marketing and trading company as well as owning more than two-thirds of the country's 16,230 kilometres pipeline network.

Indian LNG imports rose for a sixth month in the current fiscal year and are on track to be higher than the 22 million tonnes imported in 2018.

LNG imports for September came to 2.02 million tonnes com-



Gas Authority of India's main offices in New Delhi

pared with 1.93MT in September 2018, a rise of 4.9 percent.

The main operating terminals on India's West Coast are at Dahej, Hazira and Dabhol, near Mumbai, and there is one East Coast terminal at Kamarajar, 25 kilometres north of Chennai Port in Tamil Nadu.

India has reduced the cost of its LNG imports and analysts say natural gas could be made even more economical if the GAIL network of 11,400km of pipelines is opened up to other users to encourage the building of more terminals on the East Coast to boost economic development in the petrochemical, fertiliser and city-

gas sectors. LNG imports in the six months from April to September cost India \$4.7 billion compared \$5.3Bln in the same period of the previous fiscal year.

India's own domestic natural gas production is in the doldrums and in the six months from April through September, it declined by 1.5 percent to 16 billion cubic metres compared with 2018.

Production in India may increase in the next couple of years with projects such as one involving BP of the UK and Indian conglomerate Reliance Industries and more pipelines and access to them would be required.

Thai Gulf Energy Development signs accord for Vietnam project

Gulf Energy Development Public Co. of Thailand said it signed a co-operation agreement to develop a gas-fired power project and liquefied natural gas import terminal in Ninh Thuan province of southeast Vietnam.

The Thailand-Vietnam accord would lead to the building of power generation capacity of around 6,000 megawatts and an LNG regasification terminal capable of handling 6 million tonnes per annum of imports.

The Ninh Thuan province terminal will be located just south of Cam Ranh Bay, which is a deepwater port best known for serving as a huge US air and naval base during the Vietnam War.

"Gulf Energy foresees rapid economic growth in Vietnam and the continuous growth in electricity demand in accordance with Vietnam's Power Development Plan," said the Bangkok-based company.

The signing ceremony was attended by the Prime Minister of Vietnam Nguyen Xuan Phuc and the nation's Minister of Industry and Trade Tran Tuan Anh.

Gulf Energy was represented by the company's President, Porn-tipa Chinvetkitvanit as well as Thai government officials.

The signing coincided with the 35th Asean Summit taking place in the Thai capital and attended by leading regional heads of govern-

ment and ministers. Gulf Energy is the latest foreign company to be issued with a letter confirming it as one of the major investors having the financial capability and expertise in the power business, to invest in Vietnam in public-private partnership joint ventures with relevant government agencies at the provincial and national levels.

"Under the cooperation agreement, both parties agree to extend their cooperation to the exchange of studies, expertise and know-how in the field of gas-fired power plants and LNG terminal, financing capacities and any related matters," said the statement.

Showcase Your Company's LNG & Gas Solutions in Shanghai - the Commercial Hub of China

PRODUCED BY:



FROM THE PRODUCERS OF:



6TH CHINA LNG & GAS INTERNATIONAL EXHIBITION & SUMMIT

4 - 6 MARCH 2020 | SHANGHAI, CHINA
NATIONAL EXHIBITION & CONVENTION CENTRE (NECC) CHINA

LOOKING TO REACH A WIDER AUDIENCE?

Place your brand at the center of the LNG and gas international community doing business in China.
Secure your stand at the world-class exhibition and meet China's entire LNG & gas value chain
under one roof.

BOOK YOUR 2020 EXHIBITION STAND NOW

PREVIOUS PARTICIPANTS INCLUDE:

GOLD SPONSOR

VENTURE GLOBAL **LNG**

SILVER SPONSOR

CHENIERE

BRONZE SPONSOR

GTT China
中國

SUPPORTED BY:



OFFICIAL RESEARCH PARTNER:

**Wood
Mackenzie**
A Verisk Business

For more information on how to participate at China LNG & Gas International Exhibition & Summit 2020,
please contact Wayne Zhang on +44 20 7978 0085 or email us on China@thecwcgroup.com

WWW.CHINALNGGAS.COM

[Weibo](#) [LinkedIn](#) [Twitter](#) [Facebook](#) #CWCCChinaLNG

Sempra gives strategy overview on LNG and contrasting California and Texas businesses

LNG Journal editor

Sempra Energy has given a strategy report on its LNG export plans and talks with Asian buyers on project offtake after its third-quarter earnings report, while also covering California natural gas regulations and investments and its valuable Oncor utility business in Texas.

As the company reported third-quarter profits of \$813 million compared with \$274M in the same three months a year ago, a conference call was held for analysts to discuss key issue with Joseph A. Householder, Sempra Energy's President and Chief Operating Officer.

Stand-in

Householder said he was standing in for Sempra Chief Executive Jeffrey W. Martin, who was "currently traveling overseas for our LNG business, meeting with current and future partners" for



Cameron plant's first Train is in operation at Hackberry

North American LNG exports.

He said it was an accomplishment for Sempra to place into service the Cameron LNG Train 1 at Hackberry in Louisiana and advance commissioning and construction of the two remaining Trains, while finding agreement with Mexican regulatory authorities to place two natural gas pipelines into service.

This was a reference to its South

Texas-to-Tuxpan natural gas pipeline and the Guaymas-El Oro pipeline of Mexican subsidiary IEnova.

The California utility's other assets in Mexico include the Costa Azul LNG import terminal on the Pacific Coast that is being transformed into an export plant.

In addition to Cameron LNG, Sempra is developing the Port Arthur LNG export development in Texas.

"Switching to our other LNG projects, we've recently begun limited site activities at Port Arthur and our teams continue to advance discussions with interested customers for the remaining facility capacity," said the Sempra executive.

"Our management team realizes our LNG business is a large contributor to the company's projected growth," said Householder.

"With this in mind, we're focusing on bringing our LNG development projects to fruition and securing binding offtake agreements in order to help meet global energy demand and deliver value to our shareholders," he stated.

Householder said the Port Arthur project was aiming for a final investment decision by around mid- 2020.

"Overall, the project continues to make progress and we're taking some extra time to evaluate EPC proposals from two highly qualified bidders," he said.

McDermott reports progress on three US LNG projects amid third-quarter \$1.9Bln loss

McDermott International, the energy and LNG engineering company, reported progress on three US LNG export projects and with other orders pending as it also registered third-quarter losses of \$1.9 billion in the midst of a corporate overhaul and asset sales.

"We continue to pursue the previously announced strategic alternatives process for our Lummus Technology business and the sale process for the remaining portion of our pipe fabrication business," said McDermott.

"As previously announced, we decided to terminate the sale process for our industrial storage tank business," it added.

The company has suffered financial problems since it completed the \$6 billion deal in 2018 to buy LNG rival engineering, procure-

ment and construction company Chicago Bridge & Iron (CB&I).

Some of McDermott's previous losses came from a joint venture with Chiyoda Corp. of Japan and Zachry Group of the US that had experienced costly delays in its contracts to build the Cameron plant at Hackberry in Louisiana and the Texas Freeport facility.

"The net loss was due primarily to non-cash accounting charges of \$1.5Bln related to impairments of goodwill and intangible assets and \$256M of changes in gross profit on specified projects," said the company.

Operationally, four of McDermott's five operating segments reported solid performances during the quarter, led by the Middle East and North Africa (MENA) division, which reported operating income

of \$69M. Additionally, the Houston-based company reported a contract backlog of \$20.1Bln, new awards of \$1.7Bln.

"We experienced continued strong backlog, with several significant customer project awards, including the Ichthys Phase 2a Gas Field Development Project in Australia, which we developed in conjunction with our integrated subsea-solutions partner, Baker Hughes, as well as a large LNG tank project on the US Gulf Coast," said David Dickson, President and Chief Executive of McDermott.

"We also achieved solid operating results in our MENA, Asia Pacific (APAC), Europe, Africa, Russia and Caspian (EARC) and Technology segments," he added.

"At the same time, our capital structure continues to be pres-

sured by certain legacy CB&I projects," explained the CEO.

"Our recently announced \$1.7 billion financing agreement with our lenders signals their confidence in our underlying business," he stated.

"We continue working with them to achieve a long-term balance sheet solution as we remain focused on delivering value for our customers, employees, subcontractors, and suppliers," added Dickson.

McDermott said revenues of \$1.1 billion for North American operations were primarily driven by the Cameron, Freeport and other ventures.

"Significant operational achievements and milestones were achieved during the third quarter," said the company.

Powering the Energy Future through LNG



Where no natural gas pipeline exists Chart offers complete solutions for LNG as a primary fuel for power generation, or as a secondary fuel where natural gas pipeline capacity is constrained.

- Diesel, propane, LPG and oil displacement
- Remote locations and islands
- Peak shaving
- Emergency back-up and curtailment
- Temporary power generation

Email: LNG@ChartIndustries.com

www.ChartLNG.com



Innovation. Experience. Performance.®