LNG Unlimited

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Japan posts surprise surge in cargoes as LNG network grows

Gas-fired power is preferred for now while Hokkaido terminal increases its storage

Our Asia-Pacific editor

Japanese liquefied natural gas shipments for August unexpectedly surged more than 9 percent after falling in the previous four months as lower prices stimulated demand at the expense of thermal coal for power generation.

The August 2016 deliveries were 7.72 million tonnes compared with 7.06MT in the same month of 2015, an increase of 9.4 percent.

Costs

Cargoes that arrived at Japan's network of over 30 import terminals cost a total of 271.3 billion yen ($2.64Bln) compared with the August 2015 shipment costs of 414.8Bln ($4.07Bln), a drop of 34.6 percent.

That's as the Ishikari import terminal, located on the northern main island of Hokkaido, completed the commissioning of a second storage tank and began construction of a fourth tank as part of the nation's relatively modest LNG expansion plans.

The second tank has a storage capacity of 200,000 cubic metres and has received its first cargo, while tank No. 3 is also under construction and has 230,000 cubic metres of capacity. The fourth tank will also be the largest version with 230,000 cubic metres of storage.

Ishikari, which takes its name from the Ishikari River on which it stands, is one of Japan's newest regasification facilities and began commercial operations in 2012.

Growing Japanese import facility located in Ishikari Bay

It is the only large-scale LNG import base in Hokkaido, whose capital is Sapporo, and mainly imports cargoes from Sakhalin Island in the Russian Far East and from Australia.

Two of the storage tanks belong to Hokkaido Gas Co., including the first one put into operation of 180,000 cubic metres capacity, while two others still to be completed will be owned by Hokkaido Electric Power Co.

While LNG imported by Japan in August for gas-fired power generation and city-gas distribution rose, the shipments into the country of coal for generating electricity plunged by 16.6 percent to 8.2MT.

Japanese LNG imports had actually risen by a marginal amount in March 2016 for the first time since August 2015, to 8.14MT compared with 8.13MT in March last year, a rise of 0.1 percent.

However, the downward trend resumed in April 2016 when the shipments dropped 3.3 percent year-on-year to 6.38MT.

With the surprise increase in August, the Ministry of Finance figures showed that total shipments of LNG from the Middle East rose 14.9 percent.

Deliveries from countries like Qatar, the United Arab Emirates and Oman amounted to 1.90MT.

Asia shipments

Asian deliveries in August also jumped by 15 percent from a year ago from nations such as Malaysia and Indonesia, Papua New Guinea and Brunei. The shipments last month amounted to 2.25MT.

Russian imports were down 5.8 percent compared with the year before figure to 720,000 tonnes.

On August 9, Japan said the price of spot LNG cargoes imported into the country in July amounted to $6.00 per million British thermal units, up from $4.50 per MMBtu in June 2016.

The price was down from $7.90 per MMBtu on a contract basis in the year-ago period, though a delivered cargo price was not given as the minimum number of spot trades were not logged.

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UNLIMITED AGENDA

Alaska project advances on revised basis with ConocoPhillips taking marketing role

Our North America editor in New York

ConocoPhillips and the State of Alaska have taken steps to advance the Alaska LNG project on a revised basis and had formed a joint venture "aimed at facilitating the marketing of LNG" from the huge reserves of the of state's North Slope.

Alaska Governor Bill Walker made the statement in a speech to an LNG conference in Singapore, saying the move is part of a process for a North Slope-based project that will progress towards positioning the LNG project for a decision on front-end engineering and design.

Singapore

Walker was in Singapore after travelling on from South Korea where he had held talks with executives of the largest LNG buyers.

Energy majors ConocoPhillips, ExxonMobil Corp. and BP of the UK had decided earlier in 2016 to stop further investment for now in the Alaska LNG project, control of which is scheduled to be passed in December 2016 to the state's Alaska Gasline Development Corp.

The December takeover by the state would follow a transition agreement to be signed in October with its project partners.

That transition accord would enable all three energy majors to alter their status in the venture in which they each hold a 25 percent stake, along with AGDC.

This ConocoPhillips has now done, as explained by Walker in his Singapore speech.

He said the state of Alaska through AGDC and ConocoPhillips had executed a memorandum of understanding regarding negotiations to form a joint venture company that could facilitate marketing LNG from Alaska.

"AGDC and ConocoPhillips also intend to pursue the support of the other major North Slope producers in the formation of the joint venture," Walker explained.

The statement said that the MOU was part of AGDC's broader plan to position the Alaska LNG project for a decision on front-end engineering and design.

That plan includes key elements such as structuring for federal and state tax efficiencies, including seeking a federal ruling on tax exempt status and advancing low-cost financing and investor options.

The future Alaska LNG joint venture would also try to engage engineering, procurement and contracting companies "with the ability to shoulder a significant part" of the financial risk in construction.

The new venture led by AGDC would also ask the North Slope producers to commit their natural gas to it or to tolling arrangements with the overall project.

"The MOU focuses on leveraging the strengths of the parties to advance the goal of economic commercialization of the vast North Slope natural gas resources," the statement said.

"It anticipates activities that include raising market awareness of the Alaska North Slope gas resource and the Alaska LNG project," it added.

"We are pleased to be working with ConocoPhillips, the leader in Alaskan LNG, in this important phase of Alaska's major infrastructure project," said Keith Meyer, President of AGDC, who travelled with Governor Walker.

Once established, it is anticipated that the venture would focus initially on gathering LNG market information in support of the pursuit of feed-gas and LNG sales agreements as the project moves forward. ■

US Energy Secretary Moniz defends track record of department on LNG plant approvals

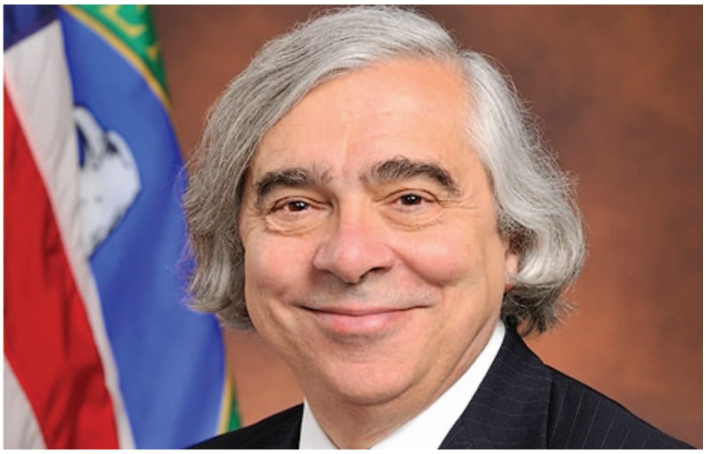
US Congress proposals to accelerate the Department of Energy's approval of liquefied natural gas export projects are unnecessary because of the government's recent good track record, Energy Secretary Ernest G. Moniz told a congressional hearing on energy.

Moniz defended DOE's LNG project review process while testifying on matters of energy security before the US House of Representatives Energy and Commerce Energy and Power Subcommittee.

"So far we have approved and, frankly, since our change in the process in 2014, we have approved quite speedily, every application that is ready for action," Moniz said.

"The idea that we are somehow dragging this out is simply incorrect," Moniz stated.

His testimony came after the DoE released a review of the US Strategic Petroleum Reserve (SPR) policy that examined infrastructure and possible bottlenecks that could restrict energy distribution.



Moniz defended DOE's LNG export project reviews

"The whole point of modernizing the SPR has been to improve the distribution of crude oil which has been compromised by our increased production," Moniz said.

Returning to the LNG issue, Moniz said that abundant natural gas resources and large production increases have created global, regional, and domestic market opportunities for US producers.

"Indeed, US exports of LNG can make a major contribution to the evolution of world gas markets," he said.

"Europe's more-flexible gas systems and well-developed markets make it an attractive US LNG export destination, although flat-to-soft demand there suggests intense competition for customers will develop," Moniz added.

"There are competing pipeline and LNG system proposals in the Eastern Mediterranean to support regional demand, with the present focus on developing regional gas pipelines," he said.

"Finally, it should be noted that the widening of the Panama Canal is taking place coincident to the growth of LNG exports from the US," Moniz said.

"This multibillion dollar infrastructure improvement could help facilitate and lower transportation costs for the US LNG trade with Asia and possibly to destinations on the west coast of South America," Moniz stated. ■

Koreans look to Asia for LNG repair order contracts

Three South Korean companies are seeking a share of the liquefied natural gas ship repair business using their extensive facilities in the northeast Asian country and are looking to Japan for contracts to help revive their maritime engineering industry.

Technology company Gas Entec, Kangnam Corp. and Goseong Offshore & Shipbuilding have signed a memorandum of understanding to launch the joint venture.

Kangnam Corp.'s ship repair division is capable of repairing 150 ships per year with modern infrastructure consisting of seven slipways and related equipment.

All three will work together on sales and marketing and would be seeking contracts on conventional LNG tankers and Floating Storage and Regasification Units.

Engineering company Gas Entec designed the floating unit that arrived in Bali in 2016 to deliver LNG to the Indonesian island.

Gas Entec also designed the engineering systems for the first US LNG bunkering vessel in the Port of Jacksonville in Florida.

South Korea's Kangnam specialises in naval shipbuilding and repairs for the country's Ministry of Defence.

"Kangnam's long experience in ship repair, Goseong's great facilities and Gas Entec's LNG engineering capability can expand our business for domestic and Japanese LNG ship repairs," said Gas Entec Chief Executive Kwak Chong-ho.

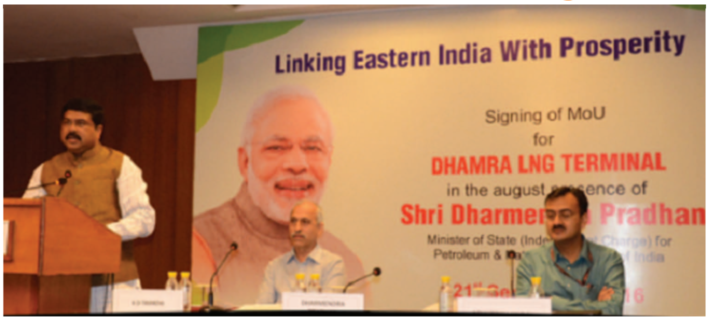
Oil tanker and container specialist Goseong is part of STX Offshore & Shipbuilding. ■

Indian group secures shareholders to help end east coast LNG drought

Our Asia-Pacific editor

Indian Oil Corp. and Gas Authority of India have signed agreements to take a combined 49 percent stake in the Adani Group's Dhamra liquefied natural gas import terminal project planned for the Bay of Bengal in northeast India.

Indian Oil will take 38 percent of the Dhamra project while GAIL will own an 11 percent stake in the facility that will have a capacity to import 5 million tonnes per annum, executives said.



Adani launches Dhamra LNG import terminal project

Stakes

The main developer is the Adani Group's petroleum subsidiary, Adani Petroleum, headquartered in Ahmedabad in the state of Gujarat in northwest India.

Adani will have a stake of 49 per cent in the terminal and the balance of 2 percent will be held by banks and financial institutions.

The Dhamra facility and infrastructure are to be completed by 2019 at a cost of around 5,000 crore rupees ($750 million) and will supply the Adani oil refineries at Haldia in West Bengal and Paradip in Odisha, the state formerly known as Orissa.

In addition to taking a stake in the project, GAIL will also sign up for 1.5 MTPA of regasification capacity at the terminal.

The Dhamra project is one of up to half-a-dozen planned for the east coast of India where there are no import terminals currently operating.

GAIL has regasification capacity at three of India's four operating import terminals on the west coast of India, at Dahej and Dabhol near Mumbai and at the Kochi facility in the southwest state of Kerala.

Other planned east coast projects to end the LNG drought there include a floating import terminal to be located near the port of Kakinada.

Royal Dutch Shell and French energy company Engie are investors in that project, along with Indian partners.

Other Kakinada shareholders include Andhra Pradesh Gas Distribution Corp. a joint venture between the state of Andhra Pradesh and GAIL.

The Kakinada import facilities will have an initial capacity of 3.5 MTPA with provisions to expand to 5.25 MTPA.

Shell already operates India's Hazira onshore import terminal north of Mumbai. The facility has been in operation since 2005. ■

LNG imports by India rise by over a third and Australia to ship more

India imported one third more liquefied natural gas in August than in the same month last year because of lower prices as the country was also set to receive volumes from Australia's Gorgon LNG plant.

The latest figures from the Indian Ministry of Petroleum and Natural Gas showed that the country received 1.58 million tonnes of LNG, or 2.144 billion cubic metres of natural gas, compared with 1.17MT of LNG in August 2015, a rise of 34.6 percent.

The cumulative imports were 7.65MT for the first five months of the current financial year, which was 25.75 percent higher than the corresponding period last year when imports had reached 6.08MT.

Petronet LNG, the main Indian importer with Gas Authority of India, has a contract with the new Gorgon LNG plant in Western Australia to receive 1.4 million tonnes per annum of shipments over 20 years.

Other Indian companies, namely GAIL, Indian Oil, Bharat Petroleum and Oil and Natural Gas Corp all have 12.5 percent stakes in Petronet, founded by the government to initiate imports.

Two Australian cargoes arrived in India earlier this month on the 155,000 cubic metres capacity carrier "British Emerald", operated by BP Shipping, and on the Chevron-operated vessel "Asia Energy", according to shipping data.

Most shipments currently come from Qatar but supplies are also received from further afield, from countries such as Nigeria, Trinidad and the US.

India's own gross production of natural gas fell last month by 5.71 percent to 2.67 Bcm compared with 2.83 Bcm in August 2015.

Gross production of natural gas in the five months from April to August amounted to 13.12 Bcm, a fall of 4.22 percent compared with April-August 2015 when output was 13.69Bcm.

India's LNG imports for the month of July had dropped 3.8 percent to 1.45MT compared with 1.50MT in July 2015. ■

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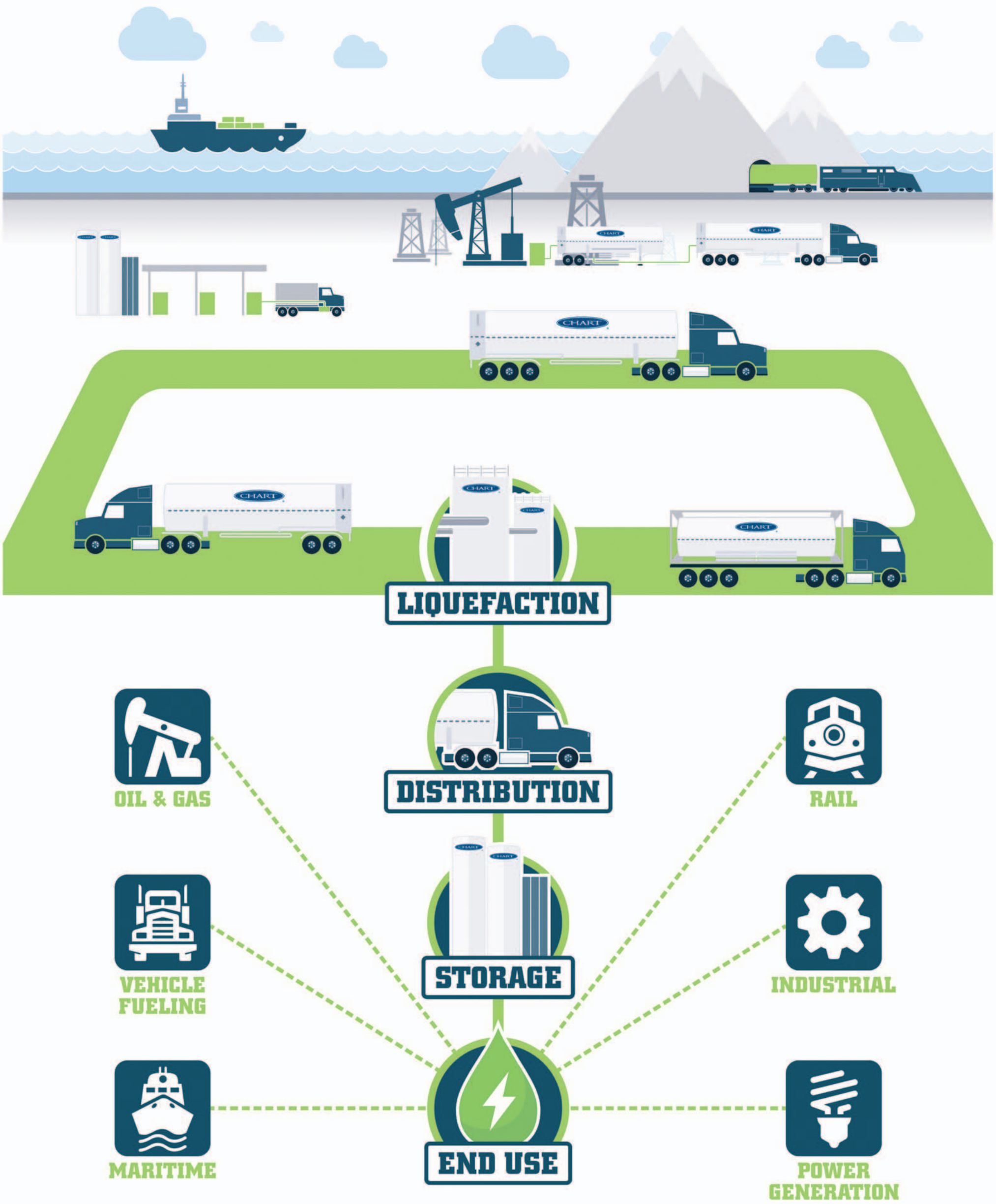

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NEWS NUDGES

LNG bunkering plan for ARA

Titan LNG, a supplier to the marine and industrial markets, has developed a pontoon system for the delivery of LNG to river barges and sea-going ships in the ports of Amsterdam, Rotterdam and Antwerp, known as the ARA and which is Europe's largest bunkering hub. Titan's LNG bunkering pontoon is called the Titan LNG Flex-Fueler. It will mostly help fuel inland waterway vessels from a fixed location. "Currently truck-to-ship delivery provides the most flexibility and is the only means of receiving LNG bunkers in the ARA region," said Niels den Nijs, Commercial Director of Titan LNG. "However, there is an increase in larger LNG-fuelled vessels coming into the market, which cannot bunker at land-based LNG stations," den Nijs added.

US spot cargo prices released

The US Department of Energy released LNG export data for July 2016. The report showed prices of US spot LNG exported from the Cheniere Energy Sabine Pass plant in Louisiana. One cargo to Spain was priced at $4.51 per million British thermal units and four others at $5.60 per MMBtu. Two of the $5.60 per MMBtu cargoes were shipped to Chile, one was delivered to China and another to Jordan in the Middle East.

Henry Hub gas moves higher

The US benchmark Henry Hub natural gas spot price for next-day delivery surged to a one-year high of $3.14 per million British thermal units, up 6 cents on September 22 from the previous day. The prices were driven by higher than normal US seasonal temperatures. US natural gas futures on the New York Mercantile Exchange also traded up, with the front-month quoted at $3.057 per MMBtu. ■

Alaska to begin trial for transport of LNG containers on trains

Our North America editor in New York

Alaska Railroad Corp. said its railway service in the US state was scheduled to start transporting containers of liquefied natural gas on trains for a trial period.

The LNG will be transported in International Standards Organization (ISO) containers from south-central to interior Alaska during a month-long operational performance project scheduled to start on September 27 between the cities of Anchorage and Fairbanks and continuing through October.

ARRC said it was the first railway service in the US to obtain permission to transport LNG by rail.

In October 2015, the Federal Railroad Administration (FRA) approved ARRC's request to move LNG in an effort to eventually help meet Alaska's growing energy needs, particularly in Interior Alaska where there are only a few natural gas pipelines to make deliveries.

Hitachi High-Tech AW Cryo, a unit of the Japanese company based in Vancouver, British Columbia, has lent the railway company two LNG ISO containers with the capacity to carry up to 26,586 litres (7,023 gallons) of LNG.

Japanese company based in Canada supplied containers

"The two 40-foot containers comply with regulatory standards that call for fortified tank walls and protective structures around the tank," the company said.

"They are manufactured by Hitachi, one of several ISO tank makers interested in Alaska's LNG market," it added.

The ISO containers for the LNG arrived in Anchorage on September 11.

Alaska Railroad said that after being cleaned, inspected and labeled, the LNG tanks were used in training for crews to become familiar with them and with methods of safe handling.

"ARRC is also training railbelt first response agencies from September 19-23 when dozens of fire fighters, emergency medical teams, police and other responders have an opportunity to become familiar with the LNG ISO containers, along with other freight and passenger railcars," the company explained.

The LNG containers will be transported in trucks for 70 miles to the Titan LNG facility near Port MacKenzie where they will be filled with the fuel.

The containers will then be returned to the Anchorage railyard to be loaded onto a flatcar and hauled 350 miles north as part of ARRC's northbound overnight freight train to Fairbanks. ■

Steelhead LNG and explorer join forces to advance export projects

Canadian First Nation-backed project company Steelhead LNG and explorer Seven Generations Energy are examining cooperation in the development of infrastructure to support Steelhead's two proposed liquefied natural gas export projects on Vancouver Island in British Columbia.

The arrangement, through which Seven Generations has also acquired a minority interest in Steelhead LNG, is expected to provide potential new markets for the explorer as well as increased certainty of feed-gas supply for Steelhead.

Seven Generations is a Canadian natural gas developer with assets in the Kakwa River project, located about 100 kilometres south of its operations headquarters in Grande Prairie, Alberta.

Steelhead is backed by two First Nation groups and is exploring two separate ventures in BC.

"This arrangement with Seven Generations creates an opportunity, in the current price environment, for a liquefied natural gas solution from well-head to customer that's uniquely led by Canadian companies," said Steelhead Chief Executive Nigel Kuzemko.

"Our shared focus on engaging early and often with Aboriginal groups and communities, combined with our collective commitment to produce and deliver low-cost, low-emissions Canadian natural gas, positions each company to succeed in expanding Canada's exports of clean-burning natural gas to Asian markets," Kuzemko added.

Steelhead said it was continuing to refine its LNG concept design to make use of floating LNG production and storage units moored to marine jetties.

It explained that the concept would contribute to the planned "low-impact, low-cost" development of Steelhead's proposed Malahat LNG venture with the Malahat First Nation. ■

Shell starts Dutch break-bulk LNG operation with small-scale cargo delivery to Sweden

Our Europe editor

The 'Coral Methane' sailed to port of Nynashamn in Sweden

Royal Dutch Shell said it had formally started its break-bulk operations from the Gate import terminal in Rotterdam by loading a small-scale carrier for a delivery to Sweden.

Shell chartered the 7,500 cubic metres capacity small-scale LNG carrier "Coral Methane" and loaded it before leaving the Dutch port to deliver the fuel on September 23 to natural gas company AGA AS in the Swedish port of Nynashamn, where an import terminal has operated since 2011.

Third jetty

The Anglo-Dutch company said the new break-bulk part of the Gate terminal, occupying a third jetty at the facility, will provide security of supply of LNG for marine and road transport customers in northwest Europe.

"The new infrastructure is positioned at Gate terminal, where LNG arrives via large chartered carriers from around the world.

"The new infrastructure receives gas in its liquid form from the storage tanks at the terminal by pipeline, and will load smaller quantities in ships for distribution.

The small-scale carrier "Coral Methane" is a multipurpose vessel developed for Netherlands-based gas transportation company Anthony Veder.

It was built by Remontowa at its shipyard in Gdansk, Poland. It entered service in May 2009 under a 15-year charter with Shell's Norwegian energy company Gasnor AS.

Shell is also building up its Rotterdam operations to include bunkering.

To serve marine customers in the port of Rotterdam, Shell has contracted a specialised LNG bunker vessel to deliver to LNG-fuelled ships in northwest Europe.

The steel-cutting ceremony of the LNG bunker vessel took place in South Korea in December 2015.

"The first LNG loading of the 'Coral Methane' at Gate's new berth is great news for our customers," said Lauran Wetemans, Shell's General Manager Downstream LNG.

"We are ready to supply Shell LNG Fuel to marine customers in northwest Europe, providing fuel options to meet the current and future needs of our marine customers," Wetemans added.

The Gate terminal is owned by Dutch natural gas utility Gasunie and storage company Royal Vopak.

"Gate terminal and its shareholders Gasunie and Vopak are excited to be sharing this milestone with Shell," said Rolf Brouwer, Managing Director of the Rotterdam LNG terminal. ■

US LNG plant contractor puts Mullen in role as new COO

Chicago Bridge and Iron, the liquefied natural gas and energy construction company, has named Patrick K. Mullen as its new Chief Operating Officer, effective immediately.

In this role, Mullen will have responsibility for CB&I's project operations and commercial and support functions around the world.

Mullen will also work with the senior executive team in developing key strategies for the future.

He most recently served as Executive Vice President and President of CB&I's Engineering & Construction operating group.

CB&I has served the LNG industry for more than 50 years, designing and building nearly every type of project, including 200 storage tanks at import and export terminals.

The company built the Peru LNG production plant at Pampa Melchorita, the only export facility in South America and is currently building two liquefaction plants on the US Gulf Coast, Cameron LNG in Hackberry, Louisiana, and the Freeport facility in Texas.

Mullen joined CB&I in 2007 through the company's acquisition of Lummus Global and has worked in strategic, operational and commercial leadership roles. He has worked in the energy infrastructure industry for more than 25 years.

"I'm pleased to announce Pat's promotion to Chief Operating Officer of CB&I," said Philip K. Asherman, CB&I's President and Chief Executive.

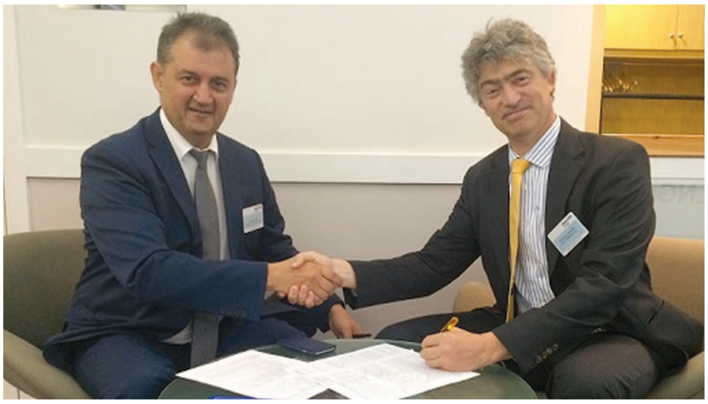
"I'm confident Pat's proven leadership will support CB&I's operations focus and continued growth in the industries we serve," Asherman added.

French LNG terminal operator and Dutch facility sign truck-bunker deal

Our Europe editor

Elengy, the liquefied natural gas terminal operator of French energy company Engie, has signed an accord with the Dutch Gate import terminal in Rotterdam to cooperate on truck-loading and bunkering.

The memorandum of understanding was signed by Pierre Cotin and Stefaan Adriaens, the commercial directors of the Gate terminal and Elengy respectively.



Elengy's Pierre Cotin and Stefaan Adriaens of Gate

Vision

"Gate terminal and Elengy share the vision that European gas markets are becoming more interconnected, LNG terminal services can strengthen this trend by progressively developing multi-site features," a joint statement said.

Elengy operates the Montoir-de-Bretagne LNG import terminal that has been in operation on the Loire River estuary in Western France since 1980.

Elengy's first terminal at Fos Tonkin, near the Mediterranean city of Marseilles, opened in 1972 to receive cargoes from Algeria.

A second import terminal for the Marseille area has been in operation at Fos Cavaou since 2010.

Elengy launched LNG truck-loading at Montoir for the retail market in 2013.

The MoU between Elengy and Gate involves exploring the development for several types of services, including truck-loading services whereby they look forward to standardizing their practices to make loading a safer, simpler and more efficient service. As regards bunkering, Gate and Elengy will study plans to support the rise of the LNG logistics by involving small LNG carriers, notably for new LNG uses such as LNG as a marine fuel.

"Gate terminal and Elengy want to contribute to enhance the European LNG market by developing innovative solutions," they added.

The two Dutch owners of the Rotterdam facility are Gasunie and global storage giant Royal Dutch Vopak.

LNG importer France shows reliance on pipelines as Russian imports surge

Gazprom executives have held talks in Paris with French counterparts and officials during which it was pointed out that the Russian natural gas giant had so far supplied 8 billion cubic metres of natural gas to France in 2016, a 27.3 per cent surge compared with the same period of 2015.

Gazprom Chairman Alexey Miller made the point after a working meeting with Jean-Bernard Levy, Chairman and Chief Executive of Electricte de France (EDF), the utility and energy company that has been commissioning its first LNG import terminal at the Channel port of Dunkirk.

The Dunkirk facility is France's fourth LNG import terminal, though the three others are operated by a subsidiary of another French company, Engie.

EDF is now almost set to start commercial operations at Dunkirk, whose other shareholders include French energy major Total and Belgian LNG terminal owner and network operator Fluxys, owner of the Belgian Zeebrugge LNG terminal.

While the EDF terminal on the Channel coast is expected to receive future cargoes from the US, the focus of the Paris talks with Gazprom was on creating new routes for Russian pipeline gas exports to Europe in the light of the resumed TurkStream project.

Gazprom executives also held another working meeting with Gerard Mestrallet, Chairman of the Board of Engie and the former CEO who handed the helm in May 2016 to Isabelle Kocher.

"The meeting participants discussed ongoing and future cooperation, including joint efforts within the Nord Stream 2 project," Gazprom said. Nord Stream 2 is the construction project for a gas pipeline with the annual capacity of 55 Bcm, running from Russia to Germany across the Baltic Sea.

France, one of the first LNG importing countries, has been relying more and more on Russian pipeline gas supplies, along with its closest ally Germany.

Russian gas exports to France from January 1 to September 13 are already just 1.7 Bcm short of the whole total for 2015 when France imported 9.7 Bcm of Russian gas, a total that was 36.8 percent higher than in 2014.

Australian energy company and LNG operator Santos names Roc Oil CEO as its new CFO

Our Europe editor

Santos Ltd., Australia's third-biggest oil and gas producer with stakes in three LNG projects, is bringing a new Chief Financial Officer into the company in the midst of a plunge in its shares that have lost more than 27 percent of their value in a month.

Santos said Anthony Neilson would be the new CFO to take over from Andrew Seaton, whose impending retirement had already been announced.

Andrew Seaton is retiring and makes way for a CEO

Acquired

Neilson is currently the Chief Executive of Roc Oil Co. Ltd, the Australian-listed company acquired in 2014 by Hong Kong-based investment firm Fosun International.

Neilson will come to Santos at a challenging time. The company operates the Gladstone coal-seam-gas-to-LNG plant in Queensland and has stakes in the ConocoPhillips-operated Darwin plant in the Northern Territory and the ExxonMobil-run Papua New Guinea LNG facility.

The company reported its first-half net loss on August 18 after taking a $1.05Bln charge on its Gladstone LNG project to reflect its true value in a falling market. The loss compared with net income in the first half of 2015 of $30 million.

As the Santos share price retreated after the earnings statement, Australia's Macquarie Bank said in a note to investors 10 days ago that the Adelaide-based company needed to raise billions more in fresh capital to stave off a credit rating downgrade. Shares in Santos were last at $3.59 on September 19 on the Australian Securities Exchange after being at $4.01 on September 9 compared with $4.95 before the last earnings were released on August 18, a fall over the month of 27.3 percent.

Macquarie said in its report that Santos should try and raise $US3.5Bln and should do so sooner than later.

Current Santos Chief Executive Kevin Gallagher only joined the company in February 2016 and said his first priority was to assess the company's assets and deliver the appropriate organisational structure to ensure that Santos was sustainable in a low oil price environment.

He said recently Santos had made good progress in the first half towards its goals.

The new CFO Neilson is a Chartered Accountant and Santos said he had significant experience in the oil and gas sector within the UK, China, South East Asia and Australia.

Previously, Neilson was CFO of Roc Oil before taking over as CEO and has held commercial, finance and business services roles at Caltex Australia, Credit Suisse First Boston (London) and Arthur Andersen (Sydney).

Santos CEO Gallagher said: "We are very pleased to have secured a high calibre and accomplished executive in Anthony Neilson.

Cheniere Energy reveals executive overhaul and VPs are given more specific duties

Cheniere Energy, operator of the Sabine Pass LNG export plant in Louisiana, has made executive changes, including the naming of a new Chief Financial Officer and has also given its senior executives more specific duties.

The changes are the latest in a series of executive moves at Cheniere following the departure from the Houston-based company of former Chief Executive and co-founder, Charif Souki, who resigned from the board in February 2016 about two months after he was ousted as CEO.

Cheniere named Michael Wortley to be executive vice president and CFO. Wortley will be responsible for Cheniere's "long-term financial strategy and increasing financial transparency," the company said.

"I am excited to announce Cheniere's new executive team, who will help us achieve our vision to be recognized as the premier global LNG company," said Chief Executive Jack Fusco.

"This is a natural evolution for the company as we transition from a development to an operating company and align our vision with shareholders," Fusco added.

In August 2016, London-based Cheniere marketing executive VP Meg Gentle left the company to join Souki at his new firm Tellurian.

Gentle will take over leadership of the Driftwood LNG venture Souki is developing with former BG Group LNG chief Martin Houston.

Cheniere is still developing the Sabine Pass export plant, the first to be operational on the US Gulf Coast and located at Cameron Parish, Louisiana.

Two Trains are on stream and the facility will consist of six Trains when completed, each with production capacity of around 4.5 million tonnes per annum of LNG.

Cheniere has also just begun a four-week shutdown of the plant through September to enable the repair of gas flares that have not functioned properly.

The Sabine Pass plant could also continue to export cargoes during the shutdown from the five LNG storage tanks at the terminal.

Other executive changes announced included Cheniere naming Anatol Feygin, currently Senior VP, Strategy and Corporate Development to be Executive VP and Chief Commercial Officer responsible for "optimizing Cheniere's assets and margin capture by focusing on continued innovation and underwriting new liquefaction capacity." Cheniere added that Tom Bullis would become Executive VP and Chief Administrative Officer, responsible for "enabling functional organizations from Human Resources and Information Technology to Supply Chain with best-in-class services that contribute to Cheniere's success."

Sean Markowitz was put in the Cheniere post of General Counsel and Corporate Secretary, responsible for "fostering a culture of compliance and communication, advising the organization as to the critical areas of legal exposure" and protecting Cheniere from legal risk.

Additionally, Corey Grindal will become Senior VP, Gas Supply, responsible for natural gas strategy, infrastructure and operations.

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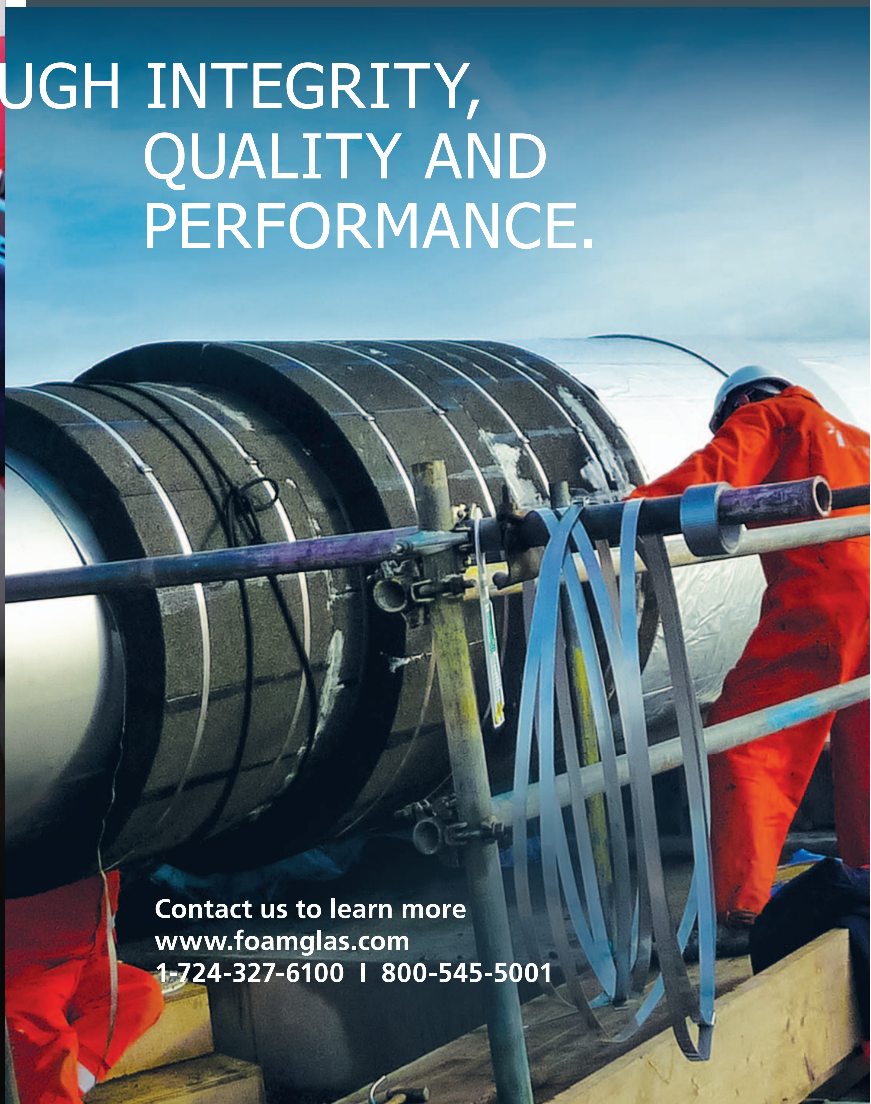

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