LNG Unlimited

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US believes LNG deliveries to EU constrained by poor regas spread

Senate examined the role of US LNG exports in meeting demand for energy across all states of the EU

LNG Journal editor

A US Energy Department statement to the Senate has highlighted deficiencies in the European Union liquefied natural gas import network that could hamper the free flow at market prices of exports from the Gulf Coast and other US regions.

The Senate Committee on Energy and Natural Resources heard the evidence at a hearing to examine the role of US LNG in meeting European energy demand.

Facilities

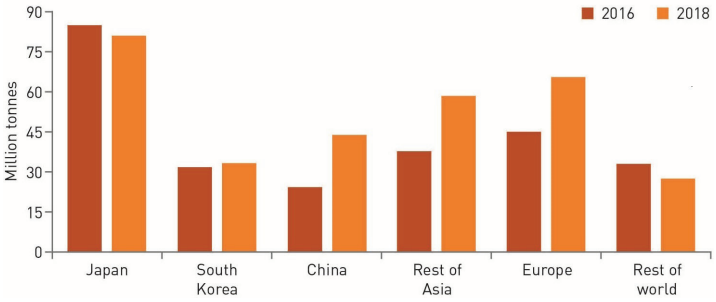
Steven E. Winberg, Assistant Secretary for Fossil Energy at the DoE, stated that despite the availability of US LNG imports into Europe, there were constraints affecting the amount that could be handled.

Winberg listed deficiencies in the EU system including the fact that LNG import capacity of around 20 billion cubic feet per day had a utilization rate of only around 20 percent. The terminals were mostly in the West of the EU.

At the same time, most Central and South-Eastern EU member states lacked LNG regasification facilities or adequate gas interconnection infrastructure to access supplies from the US.

"Specifically the ability for US LNG to compete with other pipeline gas alternatives in the EU has been slowed by two factors, including pipeline permitting and resistance to investment and the build-out of critical infrastructure," said the US official.

LNG import forecasts



US exports are changing global landscape for importers

Winberg stated that storage capacity in the EU was also insufficient and the DoE was working with the EU and member governments to help address the infrastructure issues that are impeding energy supply diversification and security in Europe.

The majority of current US LNG supplies to the EU are delivered to five member states, Spain, the UK, France, Portugal and Belgium.

"The US is strongly committed to providing Europe with access to strategic, diverse and reliable energy supplies," said Winberg.

He pointed to the advantages enjoyed by Russian pipelines supplies to the EU compared with LNG volumes from the US.

"In the fourth quarter of 2017, EU natural gas imports increased by 6 percent compared to a year earlier and Russia remained the EU's top supplier of natural gas, accounting for 43 percent of imports while LNG accounted for 12 percent of imports, including US shipments," the Senate was told.

"Particularly as EU member states decrease their reliance on generation from coal to comply with emission goals, European countries are becoming more dependent on gas overall," said the statement.

"As a consequence, due to lack of supply routes and insufficient pipeline buildout, Europe is also becoming more, not less, dependent on Russian gas," it added.

"Increasing exports of US LNG to our allies in Europe creates great opportunities for our nation to advance this administration's goal of strengthening our allies' energy security," it explained.

Priority

"Further, these exports to Europe will benefit our domestic economy," it added.

"There is no doubt that this administration has made this issue a top priority. With US LNG exports on the rise, US LNG will increase the liquidity of global LNG trade and enhance supply security for Europe," the statement continued.

"The DOE supports the EU's goal to create an interconnected European energy market, including Europe's efforts to develop LNG infrastructure that will make the region's energy markets more resilient and enhance Europe's energy security," he stated.

At present, there are a dozen large-scale US export projects, with more than 20 billion cubic feet per day of additional export capacity, under review by regulators. ■

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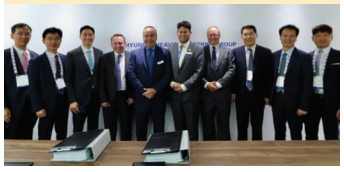

US pledge for more LNG cargoes for Poland highlights Nord Stream pipeline concerns in EU

LNG Journal editor

Poland is on track to receive additional volumes of liquefied natural gas imports from the US under purchase contracts signed by commercial companies, though the Poles would have to boost their regasification and import capacity to enjoy the economic advantages of the Transatlantic shipments.

Polish President Andrzej Duda has just visited the White House for talks with President Donald Trump, who promised to arrange a "tremendous amount of liquefied natural gas at a really good price."

Dilemma

"No nation should be dependent upon a single foreign supplier of energy," said Trump at a press conference, referring to Russia.

"Last year, the United States was proud to send its first export of LNG to Poland, and soon, our nations will launch a high-level diplomatic exchange on energy security," added Trump.

Poland currently has a single LNG import terminal, an onshore facility at the Baltic port of Swinoujscie. Polish company Polskie LNG operates the terminal with the gas network operator Gaz-System.

The Polish terminal has two standard-sized storage tanks of 160,000 cubic metres capacity and an expansion project at Swinoujscie is scheduled to be completed by 2022.

The expansion will take capacity from 5 billion cubic metres per annum to 7.5 Bcm with the addition of a third 160,000 cubic metres capacity storage tank, a second jetty and cargo re-loading, as well as facilities to fill ISO containers for LNG transport by rail and road.

The Polish LNG terminal was opened in 2015 and was backed by the European Union as a way for the Poles to lessen their dependence on Russian pipeline gas from Gazprom.

At the same time neighbouring Lithuania, the former Soviet state and now a member of the EU, opened a floating LNG import facility for the same reasons, at the Baltic port of Klaipeda.

Since then even more Russian pipeline gas is heading for the EU because of German-backed projects to increase capacity.

US LNG exports to nations such as Poland and Lithuania have been limited and since the first of the new wave of supply came on stream on the US Gulf Coast in 2016, at Sabine Pass In Louisiana, Poland has received just one shipment, while two cargoes have been exported to Lithuania.

Qatari carrier arriving at Polish terminal in Swinoujscie port

Germany for its part has been backing the build-up of pipeline imports from Russia and in March 2018 granted authorization for the Nord Stream II pipeline project to deliver an additional 55 billion cubic metres of gas to the EU.

However, Nord Stream II bypasses LNG importers Poland and Lithuania on its 1,200- kilometres route under the Baltic Sea from the Russian port of Ust-Luga, near St. Petersburg, to Greifswald in northeast Germany.

The Nord Stream II pipeline is expected to enter service in 2019 and deliver huge new volumes to Germany and the western and central parts of the EU.

Several Eastern European countries, including Poland, have opposed the pipeline and Poland's state-owned oil and gas company, PGNiG, has signed contracts for LNG sourced from new output at Cheniere Energy's Sabine Pass plant and from other US projects in Louisiana and Texas.

"We discussed threats to energy security in Europe and the possible diversification of supplies," said Poland's President Duda after his talks with the US President, referring to the Russia-Germany Nord Stream II pipeline.

"Unfortunately the construction has already been started. There are still some formalities going on connected with the laying of the pipes at the bottom of the Baltic Sea," added Duda.

"However, this investment, without any doubt, threatens energy stability in Europe," said the Polish President.

"There is a threat of Russian energy domination, especially when Russia mentions that it's going to build more pipelines, Nord Stream III and Nord Stream IV," stated Duda. ■

US Driftwood LNG project progresses on the environmental front to be on track for 2023 start

Tellurian Inc, the developer of the Driftwood LNG export plant in Louisiana and its three affiliated pipelines, received a draft environmental impact statement from US regulators to stay on track for a start-up in 2023.

The US Federal Energy Regulatory Commission prepared the draft EIS following an extensive evaluation process, including months of assessment and feedback from federal and state agencies and the public.

Tellurian and its founder and Chairman Charif Souki, the former Chief Executive of Cheniere Energy, have proposed developing six liquefaction Trains and associated facilities to produce 27 million tonnes per annum of LNG.

"We appreciate the hard work the FERC, the US Coast Guard and supporting agencies have put forth to ensure the Driftwood Project can produce LNG safely and efficiently beginning in 2023," said Tellurian President and Chief Executive Meg Gentle.

"The draft EIS is a significant milestone in the regulatory process for the project and was completed ahead of the FERC's recently updated schedule," she added.

"We continue to work in partnership with all the regulatory agencies to complete the final environmental impact statement by January 2019 and begin construction of the Driftwood project thereafter, with approximately $30 billion of infrastructure investment and nearly 50,000 direct and indirect jobs," stated Gentle.

Tellurian is based in Houston, Texas, and its common stock is listed on the Nasdaq global exchange.

The company also plans to develop its own pipeline network, including the previously announced Driftwood Pipeline and two additional pipelines to expand supply alternatives for liquefaction and domestic distribution in Louisiana.

The three pipelines are anticipated to be in-service between mid-2021 and the end of 2022, subject to commercial agreements. ■

Hoegh shuffles management to meet evolution of its projects

Hoegh LNG, one of the main LNG project companies with a growing fleet of floating storage and regasification units, has overhauled the management of its group and its US-listed affiliate as part of long-term strategy development.

Hoegh is listed on the Oslo stock exchange and has its corporate headquarters in Hamilton, Bermuda, while its Hoegh LNG Partners subsidiary is listed on the New York Stock Exchange to take advantage of energy partnership corporate benefits.

The management changes at Hoegh LNG Partners (HMLP) involves the post of Chief Executive.

Steffen Foreid, the current Chief Financial Officer at the Hoegh LNG group will take on the dual role of CEO and Chief Financial Officer of HMLP.

Hoegh said the search to employ the new CFO at the Hoegh LNG group has already started and Foreid would retain the formal role until his replacement is in place.

The Norwegian company said Richard Tyrrell, the current CEO and CFO of HMLP, would take on the role of Chief Development Officer at the Hoegh LNG group.

Ragnar Wisloff, the current Chief Development Officer of Hoegh LNG would be handed a new role as Head of Change and Transformation at Hoegh.

In the final change, Camilla Nyhus-Moller was promoted from Senior Vice President of Legal & Compliance to Chief Legal & Compliance Officer.

"I am pleased to announce the new composition of the group executive team of Hoegh LNG which is part of the group's long-term development strategy," said Sveinung J. S. Stohle, President and CEO.

Japan LNG imports rise even amid higher prices and nuclear restarts

LNG Journal editor

Japanese liquefied natural gas import prices rose by 4.4 percent last month compared with the year-ago period even as more nuclear power was on line as LNG cargo costs jumped by more than 28 percent and the nation opted for more thermal coal imports.

LNG shipments to Japan in August amounted to 7.57 million tonnes compared with 7.25MT in the same month a year ago.

Cost increases

The cost of the cargoes was 28.6 percent more than a year ago at $444.56 billion yen ($3.95Bln) versus 345.58Bln yen ($3.07Bln) in August 2017 according to the preliminary trade figures from the Japanese Finance Ministry.

The volume of shipments was lower from Asian nations and the Middle East and more cargoes were received from Australia and the spot market.

Several more of Japan's nuclear power plants, numbering more than 50, came on line in August and during September there was a total of seven in operation.

Thermal coal imports, a more economic option for power generation than LNG, rose by more than 11.3 percent to 11.25MT.

The country's LNG imports had come to 6.81MT in July versus 6.817MT in the same month of 2017, down 0.01 percent.

The monthly cost of the LNG cargoes in July 2018 had risen 16.7 percent to 385.39 billion yen ($3.50Bln) compared with 330.19Bln yen ($2.99Bln) in July 2017.

The Ministry data for August 2018 showed that Asian shipments from nations such as Malaysia and Indonesia, Papua New Guinea and Brunei dropped 14.0 percent to 1.64MT.

Imports from the Middle East region edged lower by 2.6 percent, with shipments from countries like Qatar, the United Arab Emirates and Oman totalling 1.38MT in August.

Monthly Russian shipments from the Sakhalin Island plant in the Far East declined by 19.7 percent to 525,000 tonnes.

Imports from the US amounted to 255,000 tonnes and there had been no US shipments in August 2017.

Cargoes for Japan's regas network have retained momentum

US exporter Cheniere concludes supply deal with Swiss-based Vitol

Cheniere Energy, the leading US LNG exporter, has signed its latest supply agreement with Switzerland-based global commodities company Vitol.

Cheniere said its marketing unit will provide 700,000 tonnes per annum for 15 years to Vitol on a free-on-board basis whereby the buyer provides the shipping.

The US company said the purchase price for the LNG was indexed to the monthly Henry Hub price, plus a fee.

Cheniere currently produces 18 MPTA from the Sabine Pass plant in Louisiana and output will increase to 27 MTPA when two more Trains come on stream.

Houston-based Cheniere is also constructing a second liquefaction and export plant at the port of Corpus Christi in Texas.

"We are pleased to announce this long-term SPA with Vitol, one of the fastest growing players in the global LNG market," said Jack Fusco, Cheniere's President and Chief Executive.

"This agreement continues Cheniere's commercial momentum and supports our growth plans, while demonstrating the value LNG buyers place on Cheniere's unique ability to offer flexible solutions tailored to the needs of LNG customers worldwide," stated Fusco.

Vitol is a private company founded in the Netherlands city of Rotterdam in 1966. It now has 40 offices worldwide with its largest operations in Geneva, Houston, London and Singapore.

Vitol, whose CEO is Russell Hardy, is owned by a significant proportion of its employees, providing a diverse privately-held shareholder base.

"We are delighted to be working with Cheniere, a pioneer in US liquefaction," said CEO Hardy.

"Vitol is committed to the long-term development of the LNG market. We believe that LNG has an important role to play in the future energy mix and that its evolution will require a more flexible and tradeable LNG market," added Hardy.

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NEWS NUDGES

Woodside deal with Uniper

Woodside Energy Trading, a unit of the Australian liquefied natural gas producer based in Singapore, said it signed a preliminary agreement with Germany energy company Uniper for the supply of up to 600,000 tonnes of LNG. The Australian company, operator of the North West Shelf and Pluto LNG plants in Western Australia and a stakeholder in the Chevron-operated Wheatstone plant, said the heads of agreement was for a period of four years starting from 2019. The LNG would be supplied from Woodside's Asia-Pacific portfolio to Uniper subsidiary Uniper Global Commodities for buyers in Europe and Asia. Woodside said the accord was conditional on the execution of a fully termed LNG sales and purchase agreement.

China FLNG power move

Wison Offshore and Marine of China said its 300-megawatt floating storage, regasification and power generation barge that will use regasified LNG has been approved by Lloyd's Register, the UK maritime classification society. "With a total storage capacity of 170,000 cubic metres in GTT membrane cargo tanks, it can receive full cargoes, keeping the cost of LNG supply low," said Wison. "LNG will be loaded through a ship-to-ship transfer and regasified, feeding the gas turbines. Waste heat from the turbines is recovered to generate steam, which in turn feeds the steam turbine generator. Electric power is stepped up to high voltage before transmission to shore," explained Wison.

Germany is on track for two import terminals with Wilhelmshaven FSRU

Uniper, the German energy company with LNG volumes booked from the US and Canada, is considering taking part in plans to develop a second German import terminal at the North Sea port of Wilhelmshaven in a rival project to the proposed Brunsbuettel facility on the Elbe River near Hamburg.

The Wilhelmshaven LNG venture is still in the early stages, though the plan would compete with the proposed Brunsbuettel terminal where the German utility RWE has already reserved most of the regasification capacity.

Atlantic basin

"We are in talks with interested parties about installing a floating liquefied natural gas import terminal at Wilhelmshaven," said Uniper in a statement.

"We are talking to a wide range of people, including in the US," said Uniper.

Uniper has signed two main North American agreements for LNG supplies, one with the Freeport export plant in Texas and a second with the proposed Goldboro export facility in the Canadian Atlantic Coast province of Nova Scotia.

North Sea port has large area for LNG terminal plans

The German company said the floating storage and regasification Unit (FSRU) would have a throughput capacity of around 10 billion cubic metres a year, or 7.3 million tonnes per annum of LNG and accept the largest carriers.

Uniper said it would not invest in the Wilhelmshaven terminal itself but it would be the buyer and distributor of the regasified LNG.

Duesseldorf-based Uniper favoured the North Sea port because of its access to the main European pipeline system and storage facilities such as its own plant at Etzel to where natural gas arrives by pipeline from Norway.

RWE said in early September 2018 that it had secured "a considerable part" of the capacity from Germany's first LNG terminal planned for Brunsbuettel.

Germany is the only major European Union nation without LNG import facilities, though it is advancing some LNG fuel and bunkering services in Baltic ports such as Rostock and on the European river networks for barge traffic.

RWE, based in the city of Essen, said its Brunsbuettel capacity contract followed a successful "open season" in which market interest was tested for the facility planning to import around 4 MTPA of LNG.

Dutch Gate LNG terminal owners, the utility Gasunie and global storage company Vopak, plan to develop the Brunsbuettel facility.

US LNG team of ConocoPhillips and KBR offer mid-scale Trains from 2019

US energy engineering company KBR said it planned to pursue a new phase of liquefied natural gas joint development with the processing technology of US major ConocoPhillips and concentrating on lower-cost mid-scale projects.

KBR and ConocoPhillips said they would use their extensive expertise in LNG to jointly develop a standardized processing Train that would provide mid-scale LNG capacity for both greenfield and brownfield expansions.

Their offering would be an off-the-shelf solution to reduce costs and shorten schedules for LNG facilities to be fast-tracked to production.

KBR and ConocoPhillips have agreed to complete a front-end engineering and design (FEED) quality reference design for a mid-scale capacity Train to produce between 1.5 million tonnes per annum of LNG and 3.0 MTPA.

The processing facility would be suitable for a wide range of feed gas and ambient temperature conditions.

"The integrated design approach, utilizing ConocoPhillips' proven Optimized Cascade process technology and constructed with integrated modularized construction, is expected to be available for new LNG projects starting in 2019," said the two companies.

Work began with ConocoPhillips in 2017 with KBR applying its methodology to achieve cost reductions for LNG facilities using the Optimized Cascade process.

"KBR and ConocoPhillips both have a well-established and respected history in LNG," said Farhan Mujib, KBR President for Hydrocarbons Services in the Americas.

"Building on this experience and responding to demand in the marketplace, the parties decided to focus on developing a mid-scale LNG solution that achieves low unit costs and fast deployment while maintaining high efficiency and operability," he added.

The parties will also continue to cooperate on large-scale LNG Trains utilizing similar methodology and technology.

Keppel Offshore & Marine signs GTT technical and licensing agreement for LNG storage tanks

LNG Journal editor

Keppel Offshore and Marine and French LNG storage technology firm GTT have signed a technical assistance and licensing agreement, enabling the Singaporean company to seek more contracts in the bunkering, floating storage and power businesses.

GTT said the licencing deal covered membrane containment tanks and would enable Keppel to market LNG solutions.

Outfitters

Keppel's network of global construction yards will be licensed as outfitters to offer GTT's main storage systems.

The accord covers equipping and maintaining LNG carriers, LNG bunkering vessels, LNG-fuelled vessels as well as floating storage and regasification units.

GTT said the agreement would particularly enable Keppel to focus on vessels with capacities between 30,000 and 80,000 cubic metres capacity.

Having completed its first LNG carrier repair in 1990, Keppel Offshore has long experience in handling LNG equipment across the LNG value chain.

"GTT membrane systems have become the chosen technologies for new LNG carriers and offshore applications," said the French company.

Keppel Offshore expertise and experience in GTT's systems began in 2004 when Keppel Shipyard became an approved repair yard for ships equipped with GTT membrane systems and was extended in 2014 when Keppel Singmarine, signed a license agreement for newbuilds.

"We are pleased to widen our partnership with Keppel and provide them with a broader range of LNG solutions," said Philippe Berterottiere, GTT Chairman and Chief Executive.

"GTT's technologies make it possible to build LNG carriers able to meet the growing demand for LNG supply along the coasts and up the rivers of Island nations," explained Berterottiere.

Singaporean yards have been involved in LNG chain since 1990

"By adopting our membrane technologies, Keppel O&M will be able to design optimized ships in terms of capacity, size and draught," added the GTT CEO.

Keppel Offshore Managing Director for Gas and Specialised vessels, Abu Bakar, said this was a win-win partnership with GTT as it would allow the Singaporean company to offer more comprehensive LNG solutions across its network of operations.

"With GTT's proven LNG containment technology and Keppel's track record in specialised shipbuilding as well as LNG expertise, we will be able to provide safer, more efficient and economical solutions for sustainable power generation," added Bakar.

LNG producer Woodside moves employees to new HQ in Perth

Woodside Petroleum, the operator of two liquefied natural gas export plants in Western Australia, is moving over 3,000 employees into its new corporate headquarters in the state capital Perth, complete with a roof-top swimming pool and finger-print scanning for entrance.

The move into the environmentally-friendly building finally brings life back to the site of a famous local brewery demolished 25 years ago.

The campus-style complex includes a 32-storey building on Mount Street, a 400-seat auditorium a fitness centre with a 25-metre lap pool on the roof and ground storage for almost 700 bicycles.

Woodside will operate its growing Australian and global businesses from the site, including the onshore North West Shelf and Pluto LNG plants in Western Australia and its shareholding in the Wheatstone plant in the Pilbara region.

It has been specifically designed to reduce its energy and water uses through features such as a highly efficient air-conditioning and lighting system with natural daylight access and rainwater irrigation for landscaped areas.

Woodside said its employees departing the previous St Georges Terrace office will also leave behind three symbols of office life, a security badge, paperwork and desks to call their own.

Instead, they will enter their new workplace with a fingerprint scan, sit at any desk in their team's area and use office laptops designed especially for Woodside's new office.

US Gulf Coast energy executives plan new Mississippi River plant

Two US Gulf Coast energy veterans, former Duke Energy executive Jim Lindsay and former tanker captain Tom Burgess, have formed Pointe LNG and filed a request with regulators to build a liquefaction and export plant on the eastern bank of the Mississippi River in southern Louisiana.

Pointe LNG has asked the Federal Energy Regulatory Commission for permits for a project on a site comprising about 600 acres of leased property with more than 6,500 feet of river frontage.

Schedule

The project has a proposed in-service date of the second quarter of 2025 and would consist of three LNG liquefaction Trains, each with a nameplate capacity of 2 million tonnes per annum and with connections to major regional pipelines.

The project calls for the construction of two 36-inch-diameter gas supply laterals to interconnect with the nearby existing pipeline infrastructure.

One pipeline is proposed to be built to enter the facility from the north, connecting with High Point Gas Transmission's system.

The second pipeline would enter the facility from the south and connect with the Tennessee Gas Pipeline system.

The Pointe LNG project site includes a 250-acre area where Parallax Energy, a company led by former BG Group executive Martin Houston, had proposed in 2015 to build the Live Oak project.

As founding partners in an original project called Louisiana LNG, Lindsay and Burgess sold the project to Houston and his then partner Cheniere Energy, whose Chief Executive at the time had been Charif Souki.

Burgess brings more than 30 years of experience in energy transportation and business development to the Pointe LNG venture.

As a former tanker captain, Burgess also holds an unlimited licence as a Master and First Class Pilot, issued by the US Coast Guard.

He also holds an MBA and has extensive experience in various LNG development projects.

Co-founder Lindsay has worked in LNG, natural gas storage and midstream asset development with Duke Energy Marketing & Trading, now Spectra Energy, and where he had been a vice president.

Jim Lindsay (left) and Tom Burgess have Louisiana proposals

American Bureau of Shipping approves large China LNG carrier

The American Bureau of Shipping, the US maritime classification society, built on its position as the principal classifier for Chinese LNG shipbuilders by granting approval to a new LNG carrier design at the Jiangnan Shipyard Group of Shanghai.

The Approval in Principle (AIP) granted by the US class society was for the "LNG Jumbo", a new vessel designed by the yard for larger capacities.

"The LNG carrier design specifies a low-pressure, low-speed two-stroke dual-fuel main engine propulsion system, giving enhanced engine efficiency and reduced fuel consumption," said the Jiangnan Group.

When the engine is in gas mode the system meets IMO NOx Tier III requirements without the need for exhaust gas treatment systems.

The design also includes a United States Coast Guard certified ballast water treatment system.

The carrier will feature the French GTT MK III Flex cargo containment system.

"By working with ABS to secure this AiP, we have laid the groundwork for the introduction of this type of vessel to the market," said Hu Keyi, Technical Director of the Jiangnan Group.

"This will broaden our product range in gas carriers and gas-fueled ship types, which will benefit our clients and at the same time reduce emissions," added Hu.

Patrick Janssens, ABS Vice President for Global Gas Solutions, said the US body had a proud track record of advancing the delivery of important technological developments in the LNG sector.

"ABS classed the world's first LNG carrier and today continues to lead global LNG carrier classification," he added.

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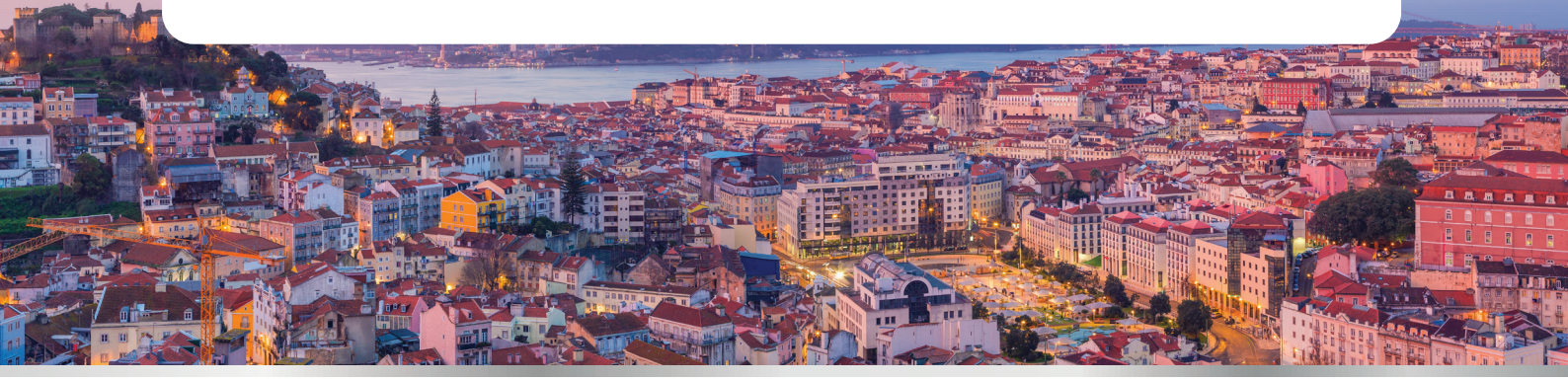

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Steelhead LNG signing accords with Hyundai for two FLNG hulls to be deployed off Vancouver

LNG Journal editor

Steelhead LNG, the Canadian export project for Vancouver Island backed by a native North American First Nation tribe, made progress at the Gastech 2018 conference in the Spanish city of Barcelona by signing accords for two floating LNG hulls.

Steelhead signed a front-end engineering and design agreements at Gastech on September 19 with Hyundai Heavy Industries of South Korea for the FLNG vessels.

Negotiations

The Canadian company had been negotiating an order for the FLNG hulls being purchased at a cost of US$500million for its Kwispaa LNG project to be located on the west coast of Vancouver Island.

"The signing marks another significant milestone in the development of the Kwispaa LNG project and follows the recent Invitation to tender to three shortlisted engineering contractors for the FEED work on the At-Shore LNG topsides, marine facilities, pre-treatment and balance of onshore plant facilities," said Steelhead.

The company said that all FEED work for the project in the province of British Columbia, fully supported by the Huu-ay-aht First Nation, is expected to commence in early 2019.

The contract signing in Barcelona was attended by Victor Ojeda, President of Steelhead LNG, Alex Brigden, Vice President for Technical and John Jack, an elected Councillor of the Huu-ay-aht First Nation.

Hyundai was represented by Yune Sung-il, Executive Vice-President, for Offshore Marketing.

Steelhead plans to liquefy natural gas sent through underground pipelines to its floating facilities production and storage facilities and to export an initial 6 million tonnes per annum of LNG to Asia.

The Kwispaa FLNG plant will be on First Nation territory about 10 kilometres north of Bamfield in Vancouver on the Pacific Coast.

Steelhead has already been awarded a Canadian National Energy Board export licence for up to 24 MTPA of exports from a plant at Sarita Bay.

Steelhead is one of the few remaining Vancouver-based energy companies focused on LNG export projects and in 2017 changed the name of the former Sarita Bay venture to Kwispaa LNG.

The name change for the Sarita project was suggested by the Huu-ay-aht First Nation, an indigenous community located on the west coast of Vancouver and the official development partners of Steelhead.

The Kwispaa project has received unanimous support from the tribal council of the small First Nation of 750 people.

The targeted in-service date for the pipeline project is the fourth quarter of 2024, subject to the receipt of the necessary regulatory approvals and permits in BC and from the federal government.

Executives of Canadian project Steelhead LNG signed a front-end engineering and design agreement at Gastech in Barcelona with Hyundai Heavy Industries of South Korea for FLNG vessels

US equity fund-backed Mexican LNG project awards engineering work to TechnipFMC

Mexico Pacific Ltd, the developer of a liquefied natural gas export project in the state of Sonora on the Mexican Pacific Coast and backed by a US equity fund, has awarded a preliminary engineering contract to TechnipFMC.

The Franco-US company will carry out pre-front end engineering and design work for the planned liquefaction and export facility.

The MPL plant will be at the Puerto Libertad deep-water port and is interconnected with the US shale-gas grid by multiple natural gas pipelines, which are already in service, to bring natural gas to the site.

The Puerto Libertad project site is contained within 1,100 coastal acres and the harbour depths are in excess of 20 metres and capable of accommodating the largest LNG carriers.

MPL said TechnipFMC would provide project management and construction support to help the joint venture construct its plant and to make progress to a final investment decision in the second half of 2019.

With offices in Houston, Texas, MPL is a venture comprising DKRW Energy Sonora Holdings and Aecom Capital, a New York-based equity fund that invests in energy and infrastructure projects.

"With the majority of its permits in place, the focus is now on execution planning and commercial activities," said MPL.

"MPL is actively negotiating long-term contracts with top tier LNG buyers across the Pacific basin," it added.

The company has Mexican regulatory permits for around 12 million tonnes per annum of LNG exports and proposes the initial construction of up to four mid-scale modular processing Trains.

"We have selected TechnipFMC as a potential solution after a year-long vetting process," said MPL President Josh Loftus.

"TechnipFMC's extensive LNG experience and, in particular their track record of successful project execution globally will help MPL achieve its goal of offering low-cost LNG to Pacific markets," stated Loftus,

Loftus formerly worked with global accountants and consultants Ernst & Young where he was a business development manager in the energy sector in Houston.

He previously held several senior roles with the General Electric Company, including at GE Oil & Gas.

Loftus received a BA in economics and business administration from the University of Missouri and an MBA from the University of Notre Dame in Indiana.