LNG Unlimited

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Two US LNG projects in Texas make progress with regulators

Port Arthur venture of Sempra and Woodside and Exelon's Annova project move forward

Our North America editor in New York

Two US LNG export projects at Port Arthur and Brownsville in Texas, planned respectively by US utility and nuclear operating company Exelon Corp. and by a Sempra-Woodside joint venture, are making progress in the third quarter of 2016.

Exelon Corp., the operator of the largest US network of nuclear power stations, is advancing with its export project proposed for the Brownsville Ship Channel and has now filed with US regulators for a permit to build and operate a mid-scale liquefaction facility.

Annova to be sited on ship channel in Cameron county

Locations

The project known as Annova LNG will be located at the Ship Channel's mile-marker 8.2 on the Brazos Santiago Pass of Cameron County, according to the application to the US Federal Energy Regulatory Commission.

Sempra Energy of California and Woodside of Australia are also pushing on with their Port Arthur venture in Texas and are likely to make a formal application for permits in September 2016 to the US Federal Energy Regulatory Commission.

The FERC has just released an update of its review of the Port Arthur proposal to construct a liquefaction, export terminal and interconnected pipeline facilities.

Annova is a subsidiary of Exelon, a publicly traded utility services holding company with its headquarters in Chicago, Illinois.

Exelon purchased the Annova project from its original developers in July 2014. It is one of three projects currently planned for the area around the port of Brownsville.

The Annova venture is proposing to build six liquefaction Trains, each with a nameplate capacity of 1 million tonnes per annum of LNG.

Annova intends to begin site preparation in the second quarter of 2018 and to begin construction in the third quarter of 2018 and for commercial operations to start in 2021.

It will also include two LNG storage tanks, each will be designed to store around 160,000 cubic metres capacity to provide sufficient inventory to accommodate the anticipated loading schedule for the LNG carriers.

The Sempra-Woodside Port Arthur plant will have two natural gas liquefaction Trains with a total export capacity of around 10 million tonnes per annum, two 160,000 cubic metres capacity storage tanks and associated marine and other facilities.

Port Arthur will also have truck-loading and unloading areas to participate in the growth of the LNG fuel market for ships and trucking.

The regulator said it was compiling its comments on the Port Arthur project that will add to Sempra's Cameron LNG export project in Louisiana, currently under construction, and its Costa Azul importer terminal on the Pacific coast of Mexico.

Woodside is already a leading LNG producer in the Asia-Pacific region, through its operation of the North West Shelf and Pluto LNG export plants in Western Australia.

The proposed Port Arthur project would use some of Sempra's 2,900 acres of property with 3 miles of waterfront on the Sabine-Neches Ship Channel and 1.25 miles of waterfront on the Intracoastal Waterway.

"The Port Arthur liquefaction project would involve the construction of an LNG export terminal and a marine facility, and the Port Arthur pipeline would involve building about 35 miles of new 42-inch-diameter pipeline to provide natural gas supply to the LNG facilities," Sempra told the regulator.

"The projects would also require the relocation of a portion of State Highway 87 and existing third-party pipelines to accommodate ship docking and loading at the marine terminal," Sempra told the FERC.

The Sempra-Woodside agreement on developing Port Arthur and signed in 2015 provides a framework for responsibilities and cost sharing. ■

UNLIMITED AGENDA

LNG Canada project of Shell and its Asian partners move back FID for second time

Our North America editor in New York

LNG Canada, the project being developed in British Columbia by Royal Dutch Shell and leading Asian energy partners, has further delayed its final investment decision originally scheduled for the end of 2016 amid the oil price slump and hostility to the hydrocarbon industry displayed by the federal government in Ottawa of Justin Trudeau.

Shell's partners in the LNG Canada venture are three of the largest Asian companies involved in LNG, Korea Gas Corp., PetroChina and Japan's Mitsubishi Corp.

LNG Canada plans include export plant at Kitimat site

Licence

Canada's National Energy Board as recently as January 2016 awarded its first 40-year LNG export licence to the Shell-led venture.

Shell said while pushing back its FID that LNG Canada remained a promising opportunity with strong support from stakeholders and the Haisla First Nations and other native North American tribes in Canada.

"It has achieved critical regulatory approvals, has important commercial and engineering contracts in place to design and build the project and through its pipeline partner Coastal Gas Link, has received necessary environmental approvals and First Nations support along the pipeline right-of-way," the statement said.

The oil price slump since 2014 has altered the economics of the industry worldwide and has led to the cancelation or postponement of many projects in Canada and elsewhere.

The building of the liquefaction plant was to have started soon at the industrial site acquired by Shell near the town of Kitimat on the Pacific coast of BC.

The first phase plan was for two LNG processing Trains, each with the capacity to produce 6.5 million tonnes per annum, with an option to add two more Trains.

"Our project has benefitted from the overwhelming support of the BC Government, First Nations - in particular the Haisla, and the Kitimat community," said Andy Calitz, Chief Executive LNG Canada.

"We could not have advanced the project thus far without it," Calitz added.

"I can't say enough about how valuable this support has been and how important it will be as we look at a range of options to move the project forward towards a positive FID by the joint venture participants," added Calitz,

"Through their efforts to build a strong LNG sector for Canada, and a critical, cleaner energy alternative for the world, the governments of British Columbia and Canada have developed sound fiscal and regulatory frameworks for success," Shell said. ■

Australian LNG operator Woodside pays $350M for ConocoPhillips Senegal stakes

Woodside, the operator of two of Australia's liquefied natural gas export plants, has signed an agreement to pay ConocoPhillips US$350 million for the US major's interests offshore the Western African state of Senegal, where an LNG project is also planned by US company Kosmos Energy.

The Australian company is buying the ConcoPhillips 35 percent stake in a Production Sharing Agreement with the Government of Senegal covering three offshore exploration blocks: Rufisque, Sangomar and Sangomar Deep.

The acquisition includes the option for Woodside to operate the future development of any resources.

The PSC includes the existing SNE and FAN deepwater oil discoveries. SNE is one of the largest global deep water oil discoveries since 2014. Woodside estimates that the SNE discovery contains 560 million barrels of recoverable oil.

Woodside Chief Executive Peter Coleman said the acquisition aligned with the company's growth strategy by providing a significant position in an under-explored and highly prospective emerging oil province.

The SNE and FAN discoveries opened up the basin, and recently completed appraisal work has confirmed high-quality resources.

"We are taking advantage of our balance sheet to acquire a world-class asset that fits well with our capabilities, offers significant future upside in exploration and line-of-sight to near term oil production.

"It builds on our agreement to acquire a 65 percent interest in the AGC Deeo exploration block located to the south in the Senegal-Guinea Bissau joint development zone and extends our regional focus in West Africa," Coleman explained.

"We look forward to working with the Government of Senegal and joint venture participants Cairn Energy, FAR Limited, and Petrosen, the Senegal National Oil Company, to progress the commercial development of SNE and any future discoveries," the CEO added.

"Woodside will bring to the joint venture expertise in deep water drilling, development and operation of subsea infrastructure and floating production storage and offloading vessels," Coleman said.

The Woodside-ConocoPhillips agreement is also likely to include an adjustment on completion of the transaction of an additional US$80M.

The completion is scheduled for the end of 2016 and is subject to satisfaction of customary conditions, including Government of Senegal approval and pre-emption rights of any of the other shareholders to buy the stake.

Kosmos Energy, a US exploration and development company based in Dallas, Texas, said in May 2016 that it was still pushing ahead with its plans for an LNG project in West Africa using its feed-gas discoveries offshore Senegal and Mauritania.

Kosmos Energy, a company listed on the New York Stock Exchange and with operations centred in Africa, gave an update on its activities in its latest earnings for the first quarter of 2016. ■

Japanese Trade Commission looks at LNG contract clauses

The Japan Fair Trade Commission, a regulatory body aimed at maintaining competitive markets, is investigating long-term liquefied natural gas supply contracts with destination clauses that impose restrictions on buyers selling cargoes on to third parties.

The JFTC inquiry could issue findings by the end of 2016.

The investigation follows a European Commission decision in October 2004 that the destination clauses in long-term LNG supply agreements restricted competition.

The Japanese Ministry of Economy, Trade and Industry has said destination clauses are a hindrance to the development of a free trading market.

The METI has said that in order to develop a flexible and liquid LNG market restrictions need to be eliminated to the "greatest extent possible" to increase the number of market players as well as trade volumes and frequencies of trades.

The amount of Japan's electricity generated from coal is forecast to overtake that from LNG, and output from renewable energy will rise by 65 percent by 2026, according to an industry report.

The last natural gas company to fall foul of the competition authorities was Russia's Gazprom, which last year was subject to a European Commission "statement of objection" alleging that some of its business practices in Central and Eastern European supply constituted abuse of its dominant market position.

Gazprom is the main supplier in Eastern European where it has a market share of more than 50 percent of pipeline supplies.

Industry leaders team up to help promote LNG as fuel of choice

Our Europe editor

SEA-LNG Chairman is US Shipping exec Peter KellerA host of leading liquefied natural gas players such as energy major Royal Dutch Shell, Middle East producer Qatargas, French importer Engie as well as shipping lines and classification societies have teamed up to promote more LNG use as a maritime fuel.

The cross-industry initiative involving 15 companies is called SEA-LNG and has named as its Chairman Peter Keller, who is also Executive Vice President of US shipping line, Totem Ocean Trailer Express, one of the pioneers of LNG maritime fuel use in North America and the Caribbean.

SEA-LNG Chairman is US Shipping exec Peter Keller

Value chain

"We recognise the need to work closely with key players across the value chain, including shipping companies, classification societies, ports, major LNG suppliers, downstream companies, infrastructure providers and equipment manufacturers to ensure an understanding of the environmental and performance benefits of LNG," Keller said.

The Sea-LNG initiative pointed out that more than 90 percent of global trade moves by sea and this trade is expected to increase substantially over the coming years.

"In terms of tonne miles, shipping is the world's cleanest form of transport. However, the volumes moved are so large that shipping is a significant contributor to global greenhouse gas (3 percent of the total global), sulphur oxides (10 percent of the total) and nitrogen oxides (15 percent of global pollution)," the SEA-LNG launch statement said.

The Emission Control Areas have come into force around the world to respond to the challenge and are increasing demand for LNG as a shipping fuel.

"Everybody is calling for alternatives to reduce environmental impacts," said Philip Olivier, Chief Executive of Engie Global LNG.

"That's why we have joined forces to actively promote LNG as a key fuel in maritime transport.

"LNG has the potential to take a 10 percent market share of global bunker demand by 2030. Engie will contribute to achieving this target," Olivier stated.

"Furthermore, regulation is not yet globally consistent, which constrains incentives for investment in the sector. SEA-LNG aims to address and help overcome these and other challenges," the companies said.

German's MAN Group chosen as supplier for LNG-powered bulker

South Korea's Hyundai Heavy Industries-Engine and Machinery Division and shipowner Ilshin have signed a shipbuilding contract for a 50,000 dead-weight tonnage bulk carrier with liquefied natural gas propulsion provided by Germany's MAN Group.

The vessel will be powered by a MAN B&W 6G50ME-C9.5-GI engine and be built by HHI.

The Korean yard has opted to supply MAN's M-type, electronically-controlled, gas-injection (ME-GI)-powered LNG propulsion system.

MAN has its headquarters in Augsburg, southern Germany, and is part of the Volkswagen Group.

The ME-GI dual-fuel engine represents many years of development work for MAN and gives shipowners and operators the option of using either LNG or heavy fuel oil.

South Korean steelmaker POSCO has already agreed to charter the newbuilding upon delivery, and will use the vessel to transport limestone for its operations.

POSCO will deliver the LNG fuel tank, which will be made of high manganese steel as an alternative material to the currently widely used nickel alloy.

HHI said the bulk carrier would be delivered in late 2017 to service a shipping contract between Ilshin Shipping and POSCO.

The ship, which would be jointly classed by the Korean Register of Shipping and the UK's Lloyd's Register, would transport limestone from Korea's Gangwon province to POSCO's steel plant at Gwangyang, where an LNG import terminal is also located.

The International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) stipulates that only nickel alloys, stainless steel, steel with 9 percent nickel content, and aluminium alloys can be used to construct LNG fuel tanks.

"POSCO has developed high-quality manganese steel for cryogenic applications, making it a better choice than other materials permitted by the IGC Code," MAN explained.

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NEWS NUDGES

Russian gas auction dates

The export division of Russian natural gas giant Gazprom said it would conduct its third gas auction for Europe on August 31 and September 1-2, 2016. Gazprom Export's auction is for the supply of Russian pipeline gas to Europe during the 2016/2017 winter period. As at the first auction in September 2015, gas will be supplied to the delivery points of Greifswald, Gaspool and Olbernhau in Germany. In addition, the buyers will have the opportunity to receive volumes at Baumgarten and Arnoldstein in Austria. Last year, the bidders were offered 127 lots with a total volume of 3.24 billion cubic metres.

Nova Scotia LNG advance

The Canadian Bear Head LNG project received the Nova Scotia Environment body's approval for its Greenhouse Gas (GHG) Management Plan for its liquefaction and export facility planned for the Strait of Canso in Richmond County, Nova Scotia. The plan provides Bear Head's strategy for managing emissions through technology selection, design and operations. "Approval of Bear Head LNG's GHG management plan is welcome news," said Greg Vesey, President of the project company.

Freeport LNG boosts feed-gas

The US Federal Energy Regulatory Commission has issued an order authorizing the Freeport LNG plant in Quintana Island, Texas, to increase its authorized maximum peak production level above initial nameplate capacity from 1.8 billion cubic feet per day to 2.14 Bcf/day. Each of the three Trains in the first phase of construction at Freeport will produce just over 5 million tonnes per annum of LNG and 13.4 MTPA of the more than 15 MTPA of output has been contracted under use-or-pay liquefaction tolling agreements. ■

Leading European LNG terminal builders Techint-Sener explain Dunkirk terminal project success

Our Europe editor

The Italian-Spanish engineering consortium that built Europe's newest liquefied natural gas import terminal at the French Channel port of Dunkirk has expressed satisfaction at the project reaching the commissioning state.

The regasification terminal was built as a turnkey project by TS LNG, a consortium comprising Techint Engineering & Construction and Spain's Sener engineering and technology group.

Dunkirk received its first commissioning cargo from Nigeria

Experience

Techint-Sener said commercial operations are scheduled to begin in mid-September. The Dunkirk success is the latest in a roster that includes import terminals completed in Mexico, Spain, the Netherlands and Poland.

Dunkirk received its first commissioning cargo on July 8, transported from the Nigerian liquefaction plant at Bonny Island on board the carrier "Madrid Sprit".

The Dunkirk facility was developed by Electricte de France (EDF). Other shareholders in the project include French energy major Total and Belgian LNG terminal owner and network operator Fluxys, owner of the Belgian Zeebrugge LNG terminal.

The Dunkirk terminal itself cost 1 billion euros ($1.13Bln) to build and is managed by the subsidiary company Dunkerque LNG.

TS LNG and Dunkerque LNG (a subsidiary of EDF) signed the turnkey contract in 2011 to build the processing plant for the terminal.

"During its four-and-a-half years of construction, the terminal achieved excellent health and safety ratios," said Techint-Sener.

"In order to complete the construction work, TS LNG coordinated with consortia in charge of the LNG tanks and the tunnel that will collect the seawater to be used in the vaporization process," they added.

"We are very satisfied to have completed such an important and strategic project for the entire gas market in Europe," said Pablo Videla, regional Managing Director of Techint E&C.

"It represents the consolidation of Techint's leadership in the regasification terminals: Dunkirk, Gate in the Netherland, Polskie LNG in Poland, Costa Azul in Mexico.

"Our aim from day one was to make Dunkirk terminal a point of reference in the sector thanks to the use of state-of-the art technical solutions to ensure plant safety and to protect the environment.

"We have also won the most important challenge, that of guaranteeing very high safety standards for all the personnel working on site," Videla stated.

The Director of Sener's Power, Oil & Gas business unit, Borja Zarraga, said the Spanish company was proud of its contribution to the Dunkirk project.

"Its entry into commercial operations will add to Sener's successful portfolio of turnkey engineering and construction projects for LNG regasification and storage terminals, a sector in which the company began working in 2003.

"As of today, we have developed eight such plants with turnkey contracts, most notably the BBG in Spain and the Gate terminal in the Netherlands, all of which include a major deployment of technology and home-grown solutions," Zarraga added.

The Dunkirk regasification plant is equipped with three 190,000 cubic metres capacity storage tanks and it has an average natural gas handling capacity of 13 billion cubic metres per annum with a maximum flow volume of 1.9 million cubic metres per hour.

The Techint-Sener consortium also oversaw the construction and installation of a berthing dock, unloading arms and pipes, storage tanks, regasification and gas emission systems, a boil-off gas recovery system, a flare stack, a seawater pump system for vaporization, auxiliary systems, and a complex with offices, control facilities and workshops. ■

> "We are very satisfied to have completed such an important and strategic project for the entire gas market in Europe"
>
> *Pablo Videla, regional Managing Director of Techint E&C.*

Driftwood LNG project of ex-Cheniere CEO Souki and former BG man Houston advances

Our North America editor in New York

Driftwood LNG, a US export development company owned by former Cheniere Energy Chief Executive Chafir Souki and ex-BG Group LNG chief Martin Houston, has filed its resource report with US regulators for a proposed export facility on the US Gulf Coast to produce 26 million tonnes per annum.

Driftwood is a subsidiary of Tellurian LNG, founded by Souki, after he was fired by Cheniere, and by Houston who had been planning his own export ventures with a company called Parallax Energy.

Pipeline

The Souki-Houston export facility is proposed for the west bank of the Calcasieu River near Carlyss in Calcasieu Parish, Louisiana, along with a related 96-mile pipeline project, according to their filing with Federal Energy Regulatory Commission.

Plant to be on west bank of Calcasieu River near Carlyss

"The projected strong overseas market demand for natural gas presents compelling economics that substantiate the need for the liquefaction and transport of LNG served by the facility," they told the FERC.

"LNG exported from the facility will remain price-competitive compared to other US-based LNG supply sources by using economies of scale to produce LNG with existing, proven, and efficient liquefaction technologies," they added.

Driftwood said it expected to file its formal permitting application to the FERC in March 2017.

Under the planning schedule put forward by Driftwood, construction of the plant could start as early as the second quarter of 2018.

The first of five liquefaction Trains to be constructed will be on stream by 2022 and the building project for all the facilities will last until 2025.

The FERC filing is signed by Houston with his title given as President of Driftwood LNG.

The Driftwood project plans to have four storage tanks on site, each with a capacity of around 175,000 cubic metres.

Driftwood is aiming to match the capacity of Cheniere's Sabine Pass LNG plant, whose development was masterminded by Souki only for him to leave the company under a cloud before the plant started shipping its first cargoes in February 2016.

The Driftwood developers also told the FERC they would partner with US engineering firm Bechtel to construct the plant and had selected Chart Industries for liquefaction technology. ■

US Senate move on consolidating bills with key LNG provisions

The US Senate voted to appoint seven members to a conference committee with the House of Representatives to reconcile corresponding energy bills affecting liquefied natural gas export projects.

The Senate and House energy bills each contain a provision that would expedite the regulatory approval process for LNG export applications.

The provisions in the bills are seen as important to allow important investment decisions to be made on the largest ventures under development on the US Gulf Coast and the East Coast.

"Now that the House and Senate have both voted to move forward with the conference process I urge members of the conference committee to ensure that the final bill contains provisions that expedite the review of LNG export applications," said Charlie Riedl, Executive Director of the Center for Liquefied Natural Gas, a Washington DC-based industry association.

"Both chambers have previously passed legislation with bipartisan support that would establish a defined window of time for the Department of Energy (DOE) to act on export applications to non-free trade agreement countries once National Environmental Policy Act (NEPA) review is complete," Riedl said.

"This key provision helps establish regulatory certainty that is critical for project developers that are planning business activity and construction projects which will create jobs, invest billions of dollars in the US economy and help stabilize world energy markets," he stated.

"This is exactly the kind of win-win issue that members from both sides of the aisle can get behind, and it should be included in the final bill," Riedl added. ■

Monaco-based GasLog signs seven-year LNG carrier charter accord with Total

Our Europe editor

GasLog Ltd., the Monaco-based LNG fleet operator with 22 ships owned and operated, has signed a seven-year time charter party with France's Total Gas & Power Chartering for a vessel currently being built at Hyundai Heavy Industries in South Korea.

GasLog said the newbuild, known as "Hull 2801", is scheduled to be delivered by HHI in 2018.

Total charters ship being built at Hyundai Heavy Industries

Greek

Greek-owned GasLog has its own 12 fully-owned LNG ships, six newbuilds on order and four LNG carriers operating under its technical management for third parties.

Total's charter will begin in mid-2018 at a date to be finalized. A further option period of three years has been granted at the charterer's option.

The charter begins at the same time as the scheduled start-up of the Yamal LNG project in Russia. Total is a shareholder in the Yamal venture and will require more shipping capacity as some of the cargoes will be trans-shipped from European terminals.

"Following the successful charter of this vessel, all of GasLog's six remaining newbuild vessels have firm, long-term charters of between seven and 10 years," the company said.

"The daily charter rate is in line with GasLog's average long-term charter rate and the gross contracted revenue from the contract is approximately $190 million over the seven-year firm period," GasLog added.

Once the newbuild vessel is delivered and chartered to Total, GasLog's New York Stock Exchange-listed affiliate, GasLog Partners, has the right to acquire "Hull 2801".

"Securing a seven-year charter on this vessel extends GasLog Partners' dropdown pipeline of future vessels from 12 to 13," GasLog explained.

Paul Wogan, Chief Executive, GasLog said he was delighted to place the newbuild on charter with Total.

"Total is both a leading and growing player in the global LNG industry and this meets our objective of broadening GasLog's long-term customer base," Wogan added.

"The charter rate is consistent with long-term industry averages, demonstrating the resilience of long term charter rates against the volatility of the short term market," he said. ■

Aker Solutions forecasts 2017 recovery amid more key foreign contract wins

Aker Solutions, the Norwegian energy and LNG project engineering company, said the markets were challenging and projects are being postponed across the industry, though cost cuts are driving down break-even levels, which may allow some major developments to be sanctioned in the next 12-18 months.

Aker's outlook was contained in its second-quarter earnings and follows two large orders announced in June and July 2016, including for the biggest natural gas development in the Eastern Mediterranean, the Zohr field offshore Egypt.

The company, listed on the Oslo stock exchange, said second-quarter sales amounted to 7 billion Norwegian crowns ($830M) compared with 8Bln crowns in the same quarter of 2015.

Gross earnings were put at 563M crowns compared with 547M crowns in the year-ago quarter, though earnings per share plunged 50 percent to 0.37 crown versus 0.73 crown a year earlier.

Aker's order backlog was 35Bln crowns compared with 44Bln a year ago.

In addition to the Egyptian contract, Aker also secured a contract from Japan's Idemitsu Oil and Gas Co. to provide engineering services for the development of oil and natural gas resources in the Nam Con Son basin offshore Vietnam.

"While offshore Norway is largely expected to remain subdued, there are signs that the region may start to see a gradual recovery from 2017," Aker said.

"Aker Solutions' greatest growth potential is outside of Norway, where the company has been expanding. Tendering activity remains steady and totals about 35Bln Norwegian crowns.

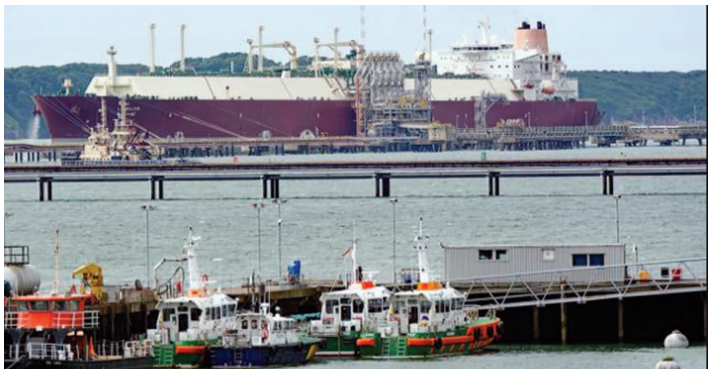
The company said it was well-placed in key growth regions of the global deepwater and subsea markets to provide the capabilities and technology to tackle the challenges of lowering costs and improving recovery rates. ■

UK terminal collision was third incident involving world's largest LNG carriers

Our Europe editor

The UK Port of Milford Haven has begun an investigation into a hard-contact collision near the South Hook import terminal between one of the world's largest LNG carriers, a Qatari Q-Max ship, and a pilot vessel that resulted in three of the pilot crew suffering minor injuries.

The incident at the UK import terminal was the third collision or contact reported involving a large Qatari LNG carrier in the past three years.



261,700 cubic metres Q-Max collided with pilot vessel

Hard contact

"We can confirm that in the early hours of July 10 an incident occurred when the pilot vessel "St Davids" made hard contact with the LNG carrier "Lijmiliya" during a routine transfer-of-pilot operation," the port said.

"The impact was such that it resulted in three of the five Port of Milford Haven crew members who were on board at the time suffering injuries which were minor in nature but required hospital attention. All three are now recovering at home," the port added.

"The pilot vessel sustained significant damage, however, there was no pollution resulting from the incident and normal shipping operations resumed," the statement said.

The 261,700 cubic metres capacity Q-Max LNG carrier "Lijmiliya" has now left Milford Haven and its latest position, according to shipping data, was offshore Portugal on July 14, heading for the Mediterranean and presumably back to its home port of Ras Laffan in Qatar.

Owned by Qatar-based shipping company Qatar Gas Shipping Co., the carrier is chartered until 2034 to deliver cargoes from the Train 5 at the Qatargas II project in Ras Laffan.

The last reported collision involving an LNG carrier also featured a vessel chartered for Qatari deliveries and occurred on October 6, 2015.

Then the 210,000 cubic metres Q-Flex vessel "Al Oraiq" was in a collision with a Dutch cargo vessel, the "Flinterstar", off the coast of Belgium while on its way to the Belgian Zeebrugge LNG import terminal.

The "Al Oraiq" is part of the fleet managed by the UK unit of Japanese shipping company, Kawasaki Kisen Kaisha, known as K-Line and the owner or operator of more than 40 other LNG ships.

The collision resulted in the cargo vessel sinking, though its crew was rescued without injury.

The "Al Oraiq" subsequently had to undergo weeks of repairs at the UK port of Belfast in Northern Ireland.

The incident before the "Al Oraiq" collision occurred in January 2015 when a carrier ran aground in the Niger Delta.

Another incident took place on December 29, 2013, when a Qatargas vessel, the Q-Flex carrier of 216,200 cubic metres capacity, the "Al Gharrafa", collided with the "Hanjin Italy" container ship in international waters of the Malacca Strait between Batam and Singapore.

The LNG carrier had been on its way from the LNG port of Ras Laffan in Qatar to Singapore with a cargo.

That 2013 accident caused no injuries and was described at the time as contact, or an allusion. The Qatargas carrier suffered bow damage and the container ship had a damaged starboard side in the middle area.

The Q-Flex carrier is the second-largest vessel of its kind in the world after the Qatari Q-Max of 266,000 cubic metres capacity. The largest Qatari vessels have now been involved in three incidents in just over three years. ■

Japanese are still paying half price for spot cargoes compared with long-term shipments

Japan said the price of spot liquefied natural gas cargoes imported into the country in June amounted to $4.50 per million British thermal units, down $3.10 per MMBtu compared with the $7.60 per MMBtu paid in the same month a year ago.

However, the spot price edged up in June compared with the $4.30 per MMBtu companies said they paid in the previous month of May.

The numbers come from the commerce division of the Japanese Ministry of Economy, Trade and Industry and are only issued if a minimum number of two trades are recorded.

They show that Japanese companies are paying half the price for spot cargoes than they are for long-term contract shipments that are linked to the lower oil price and still costing between $8.50 per MMBtu and $9.50 per MMBtu.

The ministry emphasizes that "spot LNG" refers to fuel traded on a cargo-to-cargo basis and does not mean shipments under contracts on a short-term, medium-term or long-term basis.

Prices prior to averaging are all converted into an equivalent Delivered Ex-Ship (DES) basis whereby the seller carries the cost of the shipping.

Japan's overall LNG imports declined 4 percent in May in the second successive monthly drop as the world's largest LNG importer opted for coal instead, with shipments of that commodity surging 44 percent.

The May deliveries of LNG to Japan amounted to 5.52 million tonnes compared with 5.75MT in May 2015, according to the trade statistics from the Ministry of Finance.

While LNG imported by Japan for gas-fired power generation and city-gas distribution dropped, the shipments into the country of thermal coal for generating electricity jumped 44 percent to 8.60MT in May compared with 5.98MT in the same month of 2015, even as coal prices were 10.7 percent higher year-on-year.

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.

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

The latest LNG import figures also illustrated the falling price of contract LNG with deliveries in May 2016 costing 183 billion yen ($1.75Bln), down 42.0 percent compared with 315Bln yen ($3.01Bln) in the year-ago period. ■

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