LNG Unlimited

LNG JOURNAL PUBLICATION 13 June 2017

Kinder Morgan advances again with Gulf LNG project in Mississippi

Terminal at Pascagoula was originally built to import cargoes from Angola to the US

Our North America editor in New York

Gulf terminal was acquired by Kinder in El Paso takeover

Kinder Morgan, the US pipeline and infrastructure company, is advancing again with its Gulf LNG export project at an existing terminal in the port of Pascagoula in the state of Mississippi.

The Gulf LNG project had previously been paused rather than postponed for design development reasons.

Import to export

The Gulf terminal at Pascagoula had originally been constructed to import LNG cargoes from Angola in southwest Africa from a production plant developed by international oil companies, including Chevron Corp.

However, the shale-gas boom made LNG imports into the US uneconomic and Kinder later decided to pursue the export plan.

The Gulf terminal was originally owned by US pipeline company El Paso and later acquired by Kinder.

The export venture was started with plans to build two LNG Trains with each expected to have on average production of at least 5 million tonnes per annum.

The existing Pascagoula terminal, located next to the Bayou Casotte Navigation Channel, already includes a five-mile send-out pipeline.

It is interconnected to several downstream pipelines, including Transco, Florida Gas Transmission, the Destin Pipeline and the Gulfstream Natural Gas Pipeline from where feed-gas can be transported for processing and export from Pascagoula.

The US Federal Energy Regulatory Commission has just released an update on the status of its review of Gulf LNG's application to transform and expand the existing facilities.

The FERC said it was currently analysing data submitted with the original application and preparing a draft environmental impact statement for the project to be released for public comment.

The Kinder affiliates Gulf LNG Liquefaction Co., Gulf LNG Energy and Gulf LNG Pipeline are the applicants for the venture permit.

This is the pipeline company's second LNG export project as it is also progressing with the transformation of the existing Elba Island import facility in the state of Georgia into an export plant.

The proposed Gulf project will include the installation of natural gas pre-treatment, liquefaction, and export facilities at the terminal with a total capacity of up to 11.5 MTPA.

"These facilities would allow the terminal to liquefy domestic natural gas delivered by pipeline, store the LNG in the terminal's existing LNG storage tanks, and load it into LNG vessels via the terminal's existing marine jetty," the FERC said.

The regulator was informed in the original application that the project would use many of the facilities at the existing terminal, including the LNG storage tanks and the marine berthing facility.

"Major new facilities would include two separate systems that liquefy natural gas, refrigerant make-up and condensate product storage, a truck loading-unloading area, two supply docks and flare towers.

"Gulf LNG would also modify three existing natural gas pipeline interconnections and metering stations," the company told the FERC.

The regulator noted that it had approved Gulf LNG's request to use the FERC pre-filing process on May 21, 2014.

"Additionally, between April 2016 and March 2017, our work on the project was delayed, and temporarily placed on hold by Gulf LNG while responses to our information requests were being prepared," the FERC said.

Kinder had also in 2015 sold stakes in Gulf LNG to US equity firms, including one of the world's largest, the New York-based Backstone Group.

■

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Shell and Gazprom sign latest accord for Baltic LNG plant to supply Europe and Latin America

Our Europe editor

Royal Dutch Shell Chief Executive Ben van Beurden has signed a further agreement with Russian natural gas company Gazprom to make progress for plans to build an LNG export plant on the northwest Russian coast with cargoes pointing at Europe and South America.

Van Beurden signed the latest accord with Gazprom Chairman Alexey Miller at St Petersburg International Economic Forum.

Van Beurden signs latest LNG accord with Gazprom's Miller

Concept

The document describes the concept behind the joint venture, which will secure financing for and carry out the design, construction and operation of the LNG plant on the coast about 110 kilometres west of Saint Petersburg.

Gazprom and Shell said they would take further steps in the implementation of the Baltic LNG project.

They signed the joint study framework agreement on the Baltic project primarily targeted at the European and Latin American markets.

The Baltic project replaced the LNG portion of the delayed offshore development of the huge Shtokman natural gas project in the Russian sector of the Barents Sea.

It had included a liquefaction plant with a capacity of 30 million tonnes per annum to have been constructed on the Orlovka River near the port of Murmansk.

"The signing of this document will allow the companies to start developing preliminary project documentation as soon as possible," said Gazprom.

Gazprom and Shell signed a memorandum of understanding on June 2016 on making progress on the Baltic LNG project.

It proposes the construction of the LNG plant with an annual capacity of 10 MTPA in the port of Ust-Luga on the Baltic Coast of the Leningrad Region.

Gazprom and Shell are already shareholders in the Sakhalin II project in the Russian far east where two Trains process over 10 MTPA of LNG.

Both companies are also considering construction of a third production Train at the plant as well as the expansion of their joint project portfolio, including a potential asset swap.

Sakhalin last year produced 10.9 million tonnes of LNG, exceeding the design capacity by over 1.3 million tonnes. Most of the cargoes are delivered to Japanese utilities.

Gazprom holds 50 percent plus one share in the Sakhalin plant while Shell has 27.5 percent and Japanese trading house Mitsui & Co has 12.5 percent, while Mitsubishi Corp owns 10 percent. ■

Energy Secretary Perry endorses permit for nation's first FLNG project offshore Louisiana

The US Department of Energy has approved a long-term export application from the first floating liquefied natural gas production project in North America, the Delfin LNG joint venture proposed for the Gulf of Mexico offshore Louisiana.

The FLNG project is owned by a US-Asian joint venture called Fairwood Peninsula Energy and is planning to deploy a floating liquefaction facility with four moored production and storage vessels to produce up to 13 million tonnes per annum of LNG.

The Delfin developers have already been awarded a deepwater port licence by the US Maritime Administration and the venture has been approved by the US Coast Guard, clearing the way for the first US FLNG project to proceed.

"The Department determined that exports from the Delfin LNG terminal, jointly owned by the India and Singapore-based Fairwood Group and the US-based Peninsula group, for a period of 20 years, was not inconsistent with the public interest," stated the DoE.

US Secretary of Energy Rick Perry stated he was pleased to give the authorization from the Administration for further exports "of our abundant amounts of natural gas" resources.

"Investing in American natural gas not only helps our economy and our jobs, but also helps our allies maintain their energy security," said Perry.

"This represents a true win-win for everyone involved," stated the Energy Secretary.

Delfin proposes to activate the formerly abandoned offshore system pipeline for the FLNG project and construct new connecting pipelines, a compressor station and associated facilities.

Delfin has also required onshore facilities to be reviewed by the Federal Energy Regulatory Commission in Cameron Parish.

The company signed a joint development agreement with Hoegh LNG of Norway two years ago for the supply of FLNG vessels to be built in South Korean shipyards.

In June 2016 it also signed a $1.5 billion financing contract with the state-owned Korean Development Bank to help guarantee the construction of the three project vessels in Korea.

The Delfin FLNG financing contract was signed by KDB Chairman Lee Dong-Geol and Delfin founder Frederick Jones.

The KDB finances overseas projects by providing industrial capital if that adds to South Korean economic development and guarantees jobs.

Front-end engineering design for the FLNG project has been awarded to US construction and engineering company Bechtel.

"The Department of Energy has now authorized a total of 21 billion cubic feet per day of natural gas exports to non-free trade agreement (non-FTA) countries from planned facilities in Texas, Louisiana, Florida, Georgia, Maryland, and now, with Delfin, from the Gulf of Mexico," the DoE said.

"The Delfin project would further position the United States to become the predominant LNG supplier to the rest of the world," it added.

"The DoE is eager to bring this clean burning resource and its benefits to all of our international trading partners. ■

Indonesia firm Pertamina gets LNG volumes from Woodside

Woodside, the Australian operator of two liquified natural gas export plants, said it entered into a long-term sale agreement with Indonesian energy company Pertamina.

The sale and purchase agreement was signed between the Singapore-based subsidiary Woodside Energy Trading Singapore Ltd and the state-owned Indonesian company.

The supply of the LNG cargoes to Indonesia under the Woodside contract starts in 2019.

Woodside Singapore has committed to supply initial ramp-up quantities building to around 600,000 tonnes per annum from 2022 to 2034.

The Australians also have the option to increase the supply to approximately 1.1 million tonnes per annum from 2024 to 2038.

LNG to be supplied to Pertamina under the SPA will be sourced from Woodside's global portfolio and will result in Woodside becoming a significant supplier of LNG to Indonesia.

Woodside Chief Executive Peter Coleman welcomed the finalization of the SPA with a respected company in a competitive LNG market.

"Our track record as a reliable supplier of LNG and the proximity of our key sources of LNG to Indonesia were key to achieving this deal," said Coleman.

"As more regional buyers enter the market, we are well placed to become the supplier of choice," added the CEO.

Poland receives US LNG cargo to test large volume alternatives

Our Europe editor

US LNG export company Cheniere Energy has delivered its first cargo from the Sabine Pass plant in Louisiana to Poland, one of the European nations that built a regasification terminal on the Baltic Coast to lessen its previously total dependence on Russian pipeline gas.

The 155,900 cubic metres capacity vessel "Clean Ocean" unloaded its shipment on June 8 after lifting the cargo on May 22 at Sabine Pass and transporting the LNG across the Atlantic.

Sixth in line

Poland is the second northwest European country to receive a cargo after another arrived on June 7 at the Dutch Gate import terminal in Rotterdam on board the 140,000 cubic metres capacity carrier "Arctic Discoverer".

Poland is the sixth European country to receive a US cargo after Holland, Italy, Portugal, Spain and Turkey.

The cargo shipped to Poland was at the Swinoujscie LNG terminal in northwest Poland that was completed amid great fanfare in 2015 and was described by Polish politicians as a bulwark against reliance on Russian energy imports and with a grant from the European Union.

The Swinoujscie terminal received its first cargo from Qatar for commissioning purposes on December 9, 2015.

The regasification facility allows Poland to import about 3.7 million tonnes per annum of LNG, amounting to 30 percent of the country's natural gas needs, meaning 70 percent will still have to be provided by pipelines from Russia.

The terminal project was started by Polskie LNG, established in 2007 by national oil and gas company PGNiG.

Ownership of the Swinoujscie terminal was then transferred to national gas transmission network operator Gaz-System SA.

The Polish terminal is the first onshore LNG import facility built in Eastern Europe, including the former Soviet Union.

The Baltic state of Lithuania, a former part of the Soviet Union and now an EU member, has a floating import facility located in the Baltic port of Klaipeda, called the "Independence". Lithuania receives shipments mostly from Qatar and Norway.

Mitsui OSK Lines takes delivery of ship for Australian shipments to China

Mitsui OSK Lines, the Japanese shipping company, said the latest LNG carrier it will operate was delivered from the Hudong-Zhonghua Shipyard in the Chinese port of Shanghai to transport cargoes from Australia to China.

As well as managing the ship, MOL will have a 20 percent stake, while the other owners in the joint venture include China Petroleum and Chemical Corp. known as Sinopec, and China COSCO Shipping Corp.

The "Cesi Beihai" is the third vessel built to lift free-on-board (FOB) cargoes under long-term charter to Sinopec from the Australia Pacific LNG plant near the port of Gladstone in Queensland.

The ship is named after an LNG terminal Sinopec owns at Beihai in Guangxi province of southwest China, near the border with Vietnam.

A total of six LNG carriers are being built at Hudong yard to work for the APLNG project.

'Cesi Beihai' is third vessel built to lift cargoes for China

The first vessel, the "Cesi Gladstone", was delivered in October 2016 and the second, the "Cesi Qingdao" in January 2016.

The remaining three ships will be delivered in succession by the end of 2018.

All six vessels are of the most modern design with 174,100 cubic metres capacity and membrane storage tanks.

They also have duel-fuel, diesel-electric propulsion allowing optimum speeds of 19.5 knots.

The "CESI Gladstone" also has membrane type storage tanks and duel-fuel, diesel-electric propulsion allowing optimum speeds of 19.5 knots.

Sinopec has signed up for 7.7 million tonnes per annum of LNG from APLNG for 20 years from the two processing Trains now in operation.

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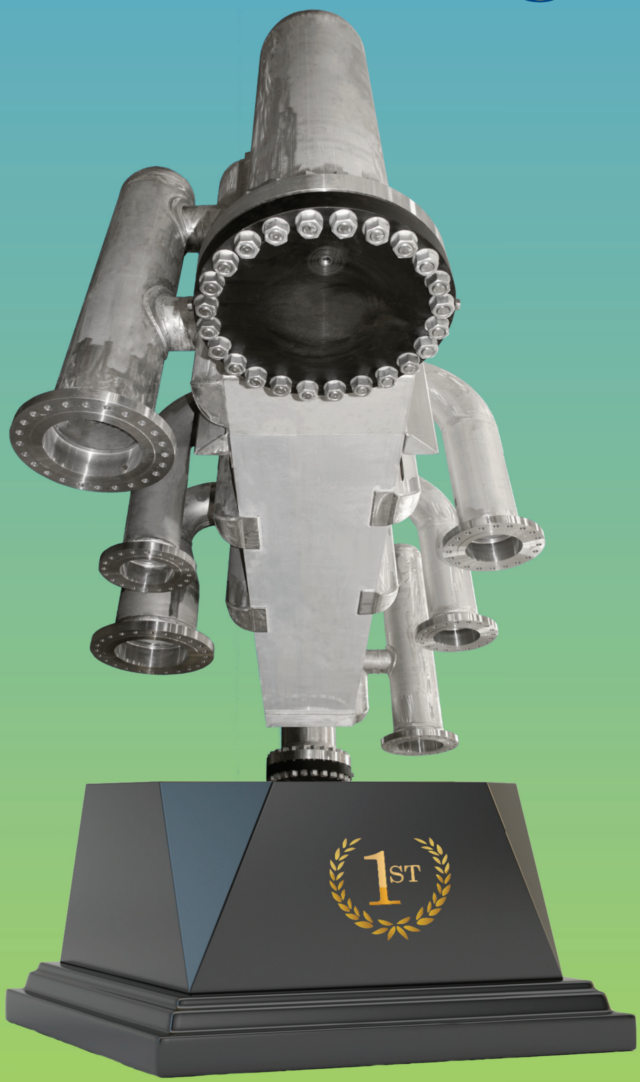

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NEWS NUDGES

Dynagas LNG profit falls

Dynagas LNG Partners, the owner and operator of a fleet of six LNG carriers, said net income fell almost 25 percent for the three months to the end of March 2017, coming in at $12.9 million compared with $17.1M in the same quarter a year ago. Dynagas also has options to buy five more carriers from its European-based affiliate Dynagas Holdings. “Part of our strategic plan has been to enter into longer-term charters for the employment of the vessels in our fleet,” said Tony Lauritzen, Chief Executive of the US-listed company.

Argentine gas field event

LNG importer Argentina has held an inauguration ceremony for the Vega Pleyade natural gas project offshore Tierra del Fuego on the southern tip of South America, considered the most difficult gas production operation in the world. It has been supplying Argentina with 9 million cubic metres per day since February 2016. The venture is operated by French energy company Total. “Vega Pleyade supplies between 7.5 percent and 8 percent of Argentina's total consumption of gas,” said Energy and Mining Minister Juan Jose Aranguren.

Saipem is in demand

Italian oil and gas drilling and pipeline services company Saipem and energy firm Eni have signed a contract for offshore drilling in Mozambique’s water to monetize LNG feed-gas resources, using the drillship “Saipem 12000”. The contract is for 15 months and will start in mid-2019. “This contract will allow the company to participate in the development of the Coral field,” said Saipem.

Owner of two North American LNG export projects ponders US listing

Our Asia-Pacific editor

LNG Ltd, the Australian developer of two North American export plants in the US state of Louisiana and in the Canadian province of Nova Scotia, said it is exploring the possibility of basing the company in the US and listing its shares on either the New York Stock Exchange or Nasdaq global exchange.

The company is still progressing with the Magnolia LNG project in Louisiana and with the Bear Head project in Nova Scotia.

Permitted

Both projects have received all their permits from regulators for construction and exports and the company itself has said it is awaiting firm supply contracts before building starts.

LNG Ltd, currently listed on the Australian Securities Exchange, said it had been evaluating a US listing and now believes that such a transaction may be of benefit to the company and its shareholders as it progresses towards the development of its US and Canadian projects.

Magnolia project site on the Calcasieu Shipping Channel at Lake Charles, leading to the Gulf of Mexico

“At this stage, the board has not specified a timetable for a decision on the potential transaction.

“Further details will be announced once any decisions are made, and once the structure and timing of any proposed transaction have been determined, including whether the company will remain listed on the ASX,” it added.

“Any proposal will be subject to approval of the company’s shareholders,” it stated.

The Magnolia project in May 2017 received a notice to proceed from the US Federal Energy Regulatory Commission, opening the way for preparation work to begin on the site for the liquefaction plant on the Calcasieu Shipping Channel near the Port of Lake Charles.

Magnolia is proposing to produce 8 million tonnes per annum from its liquefaction plant and Bear Head has similar plans.

LNG Ltd also has its own patented liquefaction processing technology called the optimized single mixed refrigerant (OSMR) system.

The Magnolia project has also previously signed a Heads of Agreement with Vessel Gasification Solutions Inc. in relation to shipping cargoes to the East Coast of India for the first time once a terminal is built.

DNV GL awards Kawasaki approval for non-spherical Moss-type tank

DNV GL, the European classification society, awarded Kawasaki Heavy Industries of Japan an approval in principle for its newly developed non-spherical Moss-type LNG storage tank.

The new tank is an International Maritime Organization Independent Type B LNG tank that has been developed for use in 180,000 cubic metres capacity LNG carriers designed to pass through the expanded Panama Canal.

“It is always a great pleasure to work with KHI, to continue what has been such a long and enjoyable cooperation,” said Johan Petter Tutturen, Business Director for Gas Carriers at the Maritime division of DNV GL.

“We worked with KHI on the delivery of the first Japanese built LNG carrier – ‘Golar Spirit’ - in 1981 and that cooperation continues to this day, as she remains in DNV GL class after her successful conversion to a Floating Storage and Regasification Unit (FSRU), a world’s first,” added Tutturen.

KHI says that the new tank has the same reliability as a spherical Moss-type tank but has an increased cargo capacity of 15 percent.

DNV GL said it carried out comprehensive sloshing and buckling analyses together with KHI, which demonstrated that the new tank provided an equivalent level of safety performance to the well-known spherical MOSS tank with no filling restrictions.

It can also be used with the Kawasaki Panel System, an advanced heat insulation system developed by KHI.

“As DNV GL’s experience with LNG has grown over the years, so too has our conviction that LNG can make a significant and positive contribution to the efficiency and sustainability of the energy and maritime industries,” added Tutturen.

Norwegian shipping line IM Skaugen refinances as it organizes new small-scale LNG portfolio

Our Europe editor

Norwegian shipping company IM Skaugen, owner of a fleet of multi-gas carriers and with small-scale LNG project proposals in the offing, said it has been working to execute a financing plan for the deferment of the 2017 maturity debt with all its lenders.

IM Skaugen said the intention is to enable its creditors to match maturity with its cash flow-generating capacity.

Ventures

The company, which has offices in Oslo and Singapore, previously said it was seeking four additional LNG projects to supply power plants with shipments amid continued small-scale deliveries in Asia.

IM Skaugen's Norgas unit is currently operating a fleet of 15 advanced gas carriers, in sizes from 6,000 cubic metres capacity to 12,000 cubic metres in capacity. They can carry LNG and other liquid gases.


Norgas fleet to have bigger presence in LNG industry sphere

The company said that with a successful execution of the "proof of concept" of its small-scale LNG project portfolio, it will have the financial ability to secure a refinancing structure with maturity to match the expected future cash-flow. "The refining extends the debt maturity until 6 April 2018. This extension will enable the next steps of the refinancing plans to be brought to fruition in the coming 10 months.

"The extension has the intention to allow the company to arrange sufficient debt financing to pay off its debt in full by the improved cash flow from its new contracts," it explained.

IM Skaugen said one of the small-scale LNG projects it was involved in is for an African gas-to- power project and was progressing well.

"The contracts signed on 23 January 2017 were subject to various conditions, including that of definitive agreements and a financial close," it added.

"The power plant clients, with support of the IMS team of professionals, are working very hard to make their facilities ready to receive and consume gas in the form of LNG.

"All equipment required has been ordered and paid and is on location or on a ship enroute to the location and ready to be installed. All equipment is site-specific and made for the small-scale LNG solution," the company explained.

The completion of the first-quarter earnings report had been pending the conclusion of the first steps of the refinancing which have now been made.

Canada makes point of praising permit for small LNG project

The small-scale Canadian LNG export project backed by Indonesian billionaire Sukanto Tanoto and his Pacific Oil and Gas company has had its 40-year export licence to ship cargoes to Asia approved by the federal government in Ottawa.

Tanoto and his company are building their export plant through a privately-held venture firm, Woodfibre LNG, at the site of an old pulp mill near the town of Squamish, north of Vancouver.

The facility in 2016 became the first LNG export project in the province of British Columbia to receive its full environmental approval from the federal government and had previously held a 25-year export licence, now extended by 15 years.

"We know there is tremendous demand for natural gas, especially in the fast-growing countries of Asia," said Canadian Minister of Natural Resources Jim Carr.

"The approval of Woodfibre LNG's 40-year export licence provides certainty for investors while creating jobs for Canadians as the world moves toward a low-carbon future," added Carr.

"This project also underscores the significance of working together with First Nations communities, as it will lead to environmental protection and economic benefits for the Province of British Columbia and the Squamish Region," he added.

Before the liquefaction project was even approved Woodfibre managed to sign a contract to supply China's Guangzhou Gas Group with 1 MTPA of LNG over 25 years, starting in 2020.

The Pacific Oil and Gas parent company of which Tanoto is Chairman has offices in Singapore and Jakarta as well as three in China, located in Hong Kong, Nanjing and Beijing. ■

Mozambique hosts contract-signing ceremony for Coral floating LNG venture

Our Africa editor

LNG event held on Maputo for Eni-led joint venture

Italian Energy company Eni has held a contract-signing ceremony in Mozambique to signal the advance of the Coral floating liquefied natural gas project, the first joint venture to tap the huge gas resources discovered by Eni in the Area 4 licence block of the southeast African nation's offshore Rovuma Basin.

The ceremony in the Mozambican capital Maputo was led by Mozambique President Filipe Nyusi, the Minister of Mineral Resources Leticia Klemens and Eni Chief Executive Claudio Descalzi.

The Coral field was discovered in May 2012 and contains around 16 trillion cubic feet of gas in place.

Offtake

Eni and its Area 4 partners have already signed an agreement with BP of the UK for the sale of the entire volumes of LNG produced by the Coral project for a period of more than 20 years.

"During the ceremony all the drilling, construction and installation contracts for the production facilities were signed, as well as agreements with the Mozambican government for the regulatory framework and financing of the project," said Eni.

The Eni Coral FLNG venture will produce around 3.4 million tonnes per annum of LNG and will match similar projects proposed for offshore Equatorial Guinea and Cameroon in West Africa.

"This achievement comes just three years since the drilling of the final exploration well in a country that is a newcomer to the global gas market," said Eni.

"Despite the challenging price environment in the last few years, the launch of this project is testament to the quality of the assets in place and to Eni's technological leadership in the development of deep-water gas fields," said the Milan-based company.

Eni explained that the FLNG facilities had attracted project finance for 60 percent of the project cost.

The financing agreement has been subscribed to by 15 major international banks and guaranteed by five export credit agencies.

"As the world transitions to a low-carbon energy mix, Eni believes that the use of gas is critical to achieving a more sustainable future," said Eni CEO Descalzi.

"Our ambition to become a global integrated gas and LNG player is based on working alongside key partners such as Mozambique. ■

TechnipFMC along with JGC and Samsung win Mozambique contract

The Coral floating LNG project being developed offshore the southeast African nation of Mozambique has chosen three global companies to make the plans a reality in terms of engineering and construction.

The engineering and construction work will be shared between TechnipFMC, the French-US company, Japan's JGC Corp. and Samsung Heavy Industries of South Korea.

The TJS consortium has the contracts for the engineering, procurement, construction, installation, commissioning and start-up (EPCIC) of the Coral FLNG facility.

The contracts include the installation of subsea associated risers and flowline systems, as well as umbilicals and other equipment.

The subsea work will be carried out at depths of 2,000 metres in the straits of the Rovuma Basin between Mozambique and Madagascar where the FLNG hull will be deployed.

"We are honored to be the leader of the execution of this prestigious contract awarded by Eni and its partners to the TJS consortium," said Doug Pferdehirt, Chief Executive of TechnipFMC.

"Combining TechnipFMC unique capabilities in both FLNG and subsea, we have been able to propose to our client an optimum combination, demonstrating the strength of our integrated offerings," added Pferdehirt.

Nello Uccelletti, President of TechnipFMC's Onshore-Offshore business, commented: "This FLNG award confirms our pioneering and leading position on the floating LNG market."

Japan's JGC explained that it and TechnipFMC would be responsible mainly for the engineering and procurement work for the FLNG topside and the management of the overall project.

"In addition, consortium partner Samsung will be responsible for the EPC work for the FLNG hull and the fabrication of the topside," explained JGC. ■

BP advances with more feed-gas plans for Trinidad LNG plant with McDermott field contract

Our North America editor in New York

Angelin natural gas field is 25 miles offshore east Trinidad

BP of the UK has advanced with more feed-gas plans for the Atlantic LNG export plant in Trinidad by signing a contract with US energy engineers McDermott International Inc. for a new natural gas field development.

BP said the engineering, procurement, construction, installation, and commissioning (EPCIC) contract was signed for the Angelin natural gas field 25 miles offshore eastern Trinidad and Tobago.

Dry gas

The Angelin project is a dry gas development in the northern Columbus Basin of the Caribbean in over 210 feet (65 metres) of water.

With a design throughput of 600 million standard cubic feet of gas per day, production will be sent to the Cassia platform for processing.

The feed-gas from the venture will be transported by pipeline to the Atlantic LNG plant at Point Fortin and the liquids produced will go to Galeota terminal via a new 13-mile pipeline. BP is also currently completing the construction of the Juniper project to supply more feed-gas to the LNG plant from 50 miles off the southeast coast of Trinidad.

The four processing Trains at Atlantic LNG are running below capacity. Last year they produced 10.46 million tonnes of LNG compared with 11.81MT the previous year.

McDermott declined to disclose the value of the award from BP but said the "large lump-sum contract" would be reflected in McDermott's second-quarter 2017 backlog. The US company said the EPCIC contract for Angelin followed its successful completion of front-end engineering and design and a pre-execution contract for the field.

McDermott said its teams in Houston, Texas, led the engineering and execution planning efforts for that work with support from the company's engineering centre in Chennai, India.

"This is a great opportunity for us to build on the relationship and trust developed through the execution of the FEED for the Angelin project," said Scott Munro, McDermott Vice President for Americas, Europe and Africa.

"Through early engagement and aligning our respective goals, McDermott and BPTT have partnered to optimize the delivery of this very important project," added Munro.

McDermott said its turnkey EPCIC work includes design, procurement, fabrication, transport, installation and commissioning of a six-slot wellhead platform and 26-inch subsea pipeline using its project management and engineering team in Houston.

The 992-tonne, four-legged main pile jacket and 1,323-tonne four-deck topside for the Angelin project will be constructed at the Altamira fabrication facility on the Gulf Coast of Mexico.

The platform and pipeline are scheduled to be installed by McDermott's "DLV 2000" work vessel, the flagship of the McDermott's global offshore pipelaying and construction fleet.

"The project demonstrates the versatility of the DLV 2000 for installations of both pipelines and platforms in a single mobilization," the company said. ■

LNG producer Woodside and Melbourne-based energy firm battle over rights in Senegal basin

The entry of Woodside Petroleum, the largest Australian LNG producer, into the oil, gas and LNG province offshore Senegal in West Africa, has been delayed by a dispute with another Australian energy company.

Woodside has just issued a statement on June 8 explaining the latest developments.

Woodside spent $US446 million to acquire a 35 percent stake from ConocoPhillips in the Sangomar Deep, Sangomar Offshore and Rufisque discoveries offshore Senegal and known as the SNE project.

The three blocks cover 7,490 square kilometres in the new hydrocarbon basin of the Atlantic Margin.

The blocks are in the same area where BP of the UK and Kosmos Energy of Dallas, Texas, are developing two floating LNG projects.

The BP-Kosmos two FLNG projects are based on a resource estimate for the Greater Tortue Complex offshore both Senegal and neighbouring Mauritania of more than 25 trillion cubic feet of gas.

First gas from Kosmos-BP FLNG Train 1 is scheduled for 2021 and the start of FLNG Train 2 is set for 2023.

The Woodside SNE licence block has now sparked a dispute between the Perth-based LNG producer and Melbourne-based Australian exploration and production company FAR Ltd, which holds a 15 percent stake in the SNE licence.

FAR claims that its rights to pre-empt the deal were not upheld when ConocoPhillips closed the deal with Woodside. Conoco and Woodside declared the deal completed in October 2016 and Woodside's latest annual report made no mention of any risk to its purchase.

Woodside's deal notification said Senegalese approval would be required before the deal was finalised but there has been no announcement that this has been granted.

Woodside said in its statement to explain the latest developments that it was perplexed by the attitude of FAR, whose Managing Director is Catherine Norman, a geophysicist by profession with 20 years of experience in the industry.

"Woodside has been advised by FAR Limited that it will not support arrangements for Woodside to undertake development works as development lead of the SNE oil field, offshore Senegal, at this time," said the statement.

"Development Lead is an important step in the transition to Woodside assuming Operatorship. The development works are essential to meet the development schedule.

"FAR is claiming that the Senegalese Government has not approved the transfer of interest in the Rufisque, Sangomar and Sangomar Deep offshore blocks from ConocoPhillips to Woodside and that FAR was not provided with proper pre-emption rights. ■

Federal Energy Regulatory Commission moves closer to acquiring a quorum to approve big LNG projects

Our North America editor in New York

The restoration of a quorum at the US Federal Energy Regulatory Commission, which gives approval to LNG export projects and natural gas pipelines and infrastructure nationwide, has moved a step closer.

The US Senate Energy and Natural Resources Committee voted 20-3 to refer the nominations of Neil Chatterjee and Robert Powelson to the full Senate for final approval.

It has been five months since the FERC has had the necessary minimum of three members on the Commission to take significant decisions and approve major projects.

Delegated

While regulators delegated some authorities to other staff, the Commission normally comprising five members has been unable to make major decisions on multi-billion ventures.

New Commissioners Neil Chatterjee and Robert Powelson

Three Democratic members of the Senate Committee voted against Chatterjee and Powelson. One senator who voted against was Bernie Sanders of Vermont who ran against Hillary Clinton for the Democratic presidential nomination.

The three opponents also included Ron Wyden of Oregon, the northwest state where the Jordan Cove LNG project is seeking a permit, and Mazie Hirono of Hawaii, the Pacific US state that is trying to upgrade its energy infrastructure.

The current acting Chair of the FERC is Cheryl LaFleur who said the agency had gone from issuing 100 orders per month to about a quarter of that volume.

"We normally issue about a hundred orders a month, and since losing the quorum commission staff have been able to get 58 orders under the new or existing delegating authority," added LaFleur.

President Donald Trump appointed LaFleur, an experienced businesswoman and lawyer as well as a Democrat, as the acting head of the FERC to start re-building the agency's management after resignations.

The FERC's five commissioners are essentially political appointees. It previously consisted of three Democrats and two Republicans.

However, two Republicans had resigned during the Obama Administration in 2015 and 2016, leaving only three Democrats at the turn of the year then two after a Democrat resigned.