

Adani Group secures Total expertise for fuel network and LNG imports

Chairman Gautam Adani:
‘We are looking forward to this opportunity to touch millions of lives’
LNG Journal editor

Adani Group Chairman Gautam Adani and Total Chairman and Chief Executive Patrick Pouyanne have signed an agreement for a 10-year investment plan in the Indian market, including joint ventures in liquefied natural gas and a nationwide network of stations for cleaner fuel.

Adani and Total said they would set up a first Indian venture with the objective of building a retail network of 1,500 service stations over a period of 10 years, according to their joint statement.

Targets

They would also set a target for developing various LNG regasification and import terminals, including the Dhamra terminal on the East Coast, where no Indian LNG facilities currently exist.

Adani had been seeking a major partner for its East Coast terminal at Dhamra port on the Bay of Bengal in the state of Odisha, formerly known as Orissa.

Adani is also a stakeholder in the new Mundra LNG import terminal in Gujarat state on the West Coast

“I am delighted to partner with Total, one of the biggest energy companies in the world” said Adani Chairman Gautam Adani.

“The collaboration enables us to associate with Total’s century-old legacy, global presence, scale and unparalleled go-to-market expertise,” added the Chairman.

“The global synergy between the two groups presents widespread benefits and long-term



Adani Chairman Gautam Adani (right) and Total's Patrick Pouyanné after signing their cooperation accord

value for the economy and the people of India.

“We are looking forward to this opportunity to touch millions of lives by leveraging our collective footprint and domain expertise in the energy sector,” he stated.

“It also enables the Adani Group to be part of the country’s vision of adopting cleaner energy,” the Adani Chairman added.

Adani Gas, its subsidiary, is developing compressed natural gas (CNG) stations for the transport sector in India that is interesting for Total, which is already a gas fuel market leader in the US through its stake in California-based Clean Fuel Corp.

In regard to Indian LNG, Total had previously held a 26 percent stake in the Hazira LNG import terminal near Mumbai, operated by Royal Dutch Shell.

However, the French company agreed to sell the Hazira stake to Shell while remaining a supplier of some LNG volumes to the facility.

As part of the Hazira stake sale Total signed an agreement to supply 500,000 tonnes annum for the Indian market over five years from

its global volumes of more than 40 million tonnes per annum.

Total has stakes in LNG production ventures worldwide, including the recently started Ichthys LNG plant in Australia and the Yamal liquefaction facility in Russia, and is looking for outlets for supplies in one of the world’s fastest-growing economies.

“India’s energy consumption is set to grow the fastest among all major economies in the world over the next decade,” said Total CEO Pouyanne.

“The partnership between Total and the Adani Group illustrates our joint commitment to assisting India to diversify its energy mix and to ensure a supply of reliable, affordable and clean energy to consumers,” added Pouyanne.

“We are thrilled to build this broad partnership with the Adani Group, benefitting from its in-depth knowledge of the Indian energy market, as well as its access to infrastructures through a significant footprint in several of the country’s key ports,” stated the French CEO.

UNLIMITED AGENDA

EARNINGS

Australian Santos boosts income from LNG with prices at US\$10.43

2

CORPORATE AGM

APLNG heartens shareholders with good news amid fractious politics

3

FUEL MARKET



ABS holds key China talks in Xiamen port covering LNG and other shipping issues

5

IMPORTS

Egypt winds down FSRU LNG import charters amid revised strategy

6

EXPORTS

Cheniere starting two new Trains and is confident on China trade

7

PROJECTS

Gulf Coast new wave gathers pace as developers start to build momentum

9

Santos of Australia boosts income from stakes in LNG plants with prices at US\$10.43 per MMBtu

LNG Journal editor

Santos of Australia, a stakeholder in three liquefied natural gas export plants, posted record quarterly LNG sales revenue as its average LNG price soared to US\$10.43 per million British thermal units compared with US\$7.50 in the same three months of 2017.

Overall oil and gas sales revenue rose 10 percent to A\$973 million (US\$692.6M), including record quarterly LNG revenues of A\$405M.

PNG record

Santos said the Papua New Guinea LNG plant, operated by ExxonMobil, achieved a record daily production rate equivalent to 9.2 million tonnes per annum.

A total of 31 cargoes were shipped from the PNG plant northwest of Port Moresby during the three-month period versus 29 cargoes in the year-ago quarter.

"Santos along with the other PNG LNG parties and the Papua LNG Joint Venture are also continuing discussions to build alignment for the proposed construction of three additional LNG Trains at the



Gladstone LNG plant on Curtis Island is operated by Santos

PNG LNG site, with two Trains to process gas from the Papua LNG project and one Train for the planned PNG LNG expansion," stated Adelaide-based Santos.

Santos itself is operator of the Gladstone LNG plant in Queensland and is a shareholder in the Darwin plant in the Northern Territory operated by US major ConocoPhillips.

"Third-quarter sales revenues were higher than the prior quarter primarily due to higher commodity prices, a full quarter of production from PNG LNG following the impact of the earthquake in the first-half and the planned one-month maintenance shutdown of

the Bayu Undan-Darwin LNG facilities in May," explained Santos.

Santos said a total of 14 cargoes were shipped from Darwin LNG compared with nine in the previous quarter and 11 in the third quarter of 2017.

"A final investment decision on the Barossa project to backfill Darwin LNG is targeted towards the end of 2019," said Santos.

"The FPSO design competition between Modec and the TechnipFMC-Samsung consortium is progressing well," it added.

"The successful development of Barossa would extend the operating life of Darwin LNG for more

than 20 years," it said.

At Gladstone LNG, third-quarter production of 1.2 million tonnes was in line with the previous quarter and 20 cargoes were loaded.

"Higher GLNG equity gas production contributed to higher volumes delivered to the domestic market, while GLNG equity gas delivered to the LNG plant was in line with the prior quarter," said Santos.

The company's Cooper Basin oil production in south Australia increased 17 percent, including the highest monthly production rates since 2009.

At the end of the third quarter, the drilling started at the first of the Moomba South appraisal wells targeting "significant" resources.

"With a balance sheet now supportive of growth, we also announced the value accretive acquisition of Quadrant Energy's high-quality portfolio of low-cost, long-life conventional natural gas assets in Western Australia," said Chief Executive Kevin Gallagher in the third-quarter activities report.

Woodside Petroleum takes quarterly LNG sales revenue to US\$881M with Wheatstone boost

Woodside Petroleum, the operator of two LNG export plants in Western Australia, posted a 26 percent rise in third-quarter LNG revenue of US\$881 million compared with US\$697M in the same three months of 2017 as it benefited from higher prices and its stake in the new Wheatstone liquefaction and export plant.

Woodside said it delivered its 5,000th North West Shelf LNG cargo from Dampier in Western Australia during the third quarter as its Wheatstone stake boosted volumes and it planned domestic and overseas expansion.

The company said it delivered production of 23.1 million barrels of oil equivalent and total sales

revenue of US\$1.29 billion versus US\$1.01Bln in the year-ago quarter.

Woodside said its realised LNG prices for North West Shelf cargoes averaged US\$8.40 per million British thermal units, US\$9.90 per MMBtu for Pluto shipments and US\$10.40 for its volumes from the Wheatstone plant, operated by Chevron Corp.

In its continuing cargo marketing activities, Woodside's Singapore office signed an accord with Uniper Global Commodities of Germany for the supply of up to 600,000 tonnes of LNG per annum for a period of four years from 2019.

"The LNG would be supplied from Woodside's portfolio to markets in Europe and Asia," said

Woodside. Quarterly highlights also included the start of the concept definition procedure phase for Browse Basin natural gas resources to be processed through the North West Shelf plant that has been in operation since 1989.

Woodside also selected Bechtel Inc. of the US as the preferred engineering, procurement and construction contractor for the concept definition work for Train 2 of its Pluto LNG plant in Western Australia.

In its overseas operations, the Perth-based company submitted the evaluation report to the Government of Senegal in West Africa for the SNE field Development-Phase 1.

Its Asian activities saw further success in its exploration activities offshore Myanmar. The company's latest drilling encountered a significant gas column in the Shwe Yee Htun-2 appraisal well.

"Production at Wheatstone LNG continued ahead of plan, underpinning a 13.8 percent rise in output compared with the corresponding quarter in 2017," said Woodside Chief Executive.

"Sales revenue increased 25.4 percent over the same period to US\$1,157 million on the back of higher prices, although sales volumes were tempered slightly by the timing of Woodside equity sales," explained the CEO.

Mozambique developer Eni tries for more gas success

Italian energy company Eni said it signed a contract in Mozambique to explore a new offshore block in the Northern Zambezi Basin after its successes in the Area 4 block of the Rovuma Basin from where it is currently developing onshore and floating liquefied natural gas projects.

Eni said its executive signed the latest agreement with the Mozambican Ministry for Mineral Resources and Energy, Ernesto Max Tonela.

"With this acquisition, Eni further strengthens its presence in Mozambique, a country that has a strategic relevance for the company," said the Italian company.

The A5-A block was awarded to Eni as a result of its participation to the latest and fifth competitive licensing round launched by the southeast African nation.

The block for exploration and development covers an area that extends over 5,100 square kilometres at water depths of between 300 metres and 1,800 metres.

Eni said the area is a completely unexplored zone in front of the town of Angoche in Namapula province and located about 1,500 kilometres northeast of Maputo.

As operator of block A5-A, Eni will hold a 59.5 percent share while other partners include South African energy company Sasol with 25.5 percent and Mozambican state company Empresa Nacional de Hidrocarbonetos (ENH) with 15 percent.

"Following an intense exploration campaign that spanned just three years, between 2011 and 2014, the supergiant gas fields of Coral, Mamba and Agulha were discovered with estimated natural gas reserves in place of 2,407 billion cubic metres," explained Eni.

Origin heartens shareholders with good news amid fractious politics

LNG Journal editor

Origin Energy, a stakeholder in the Australia Pacific LNG plant in Queensland, said the facility shipped more cargoes during the Sydney-based company's fiscal year as its integrated gas business surged because of higher LNG revenues.

"I'm pleased to report our Integrated Gas business continues to go from strength to strength," said Chief Executive Frank Calabria in addressing the annual meeting at the Sydney Sofitel in Wentworth on October 17.

Recovery

"A recovery in commodity prices and record production at Australia Pacific LNG saw underlying earnings increase by 67 percent to A\$1.3 billion (US\$928 million), and we hit the milestone of net cash flows back to Origin of A\$363M," added the CEO.

Calabria said APLNG, whose other shareholders include ConocoPhillips and Chinese major Sinopec, shipped 125 LNG cargoes during Origin's fiscal year and continued to be a major supplier of gas to the domestic market, supplying close to 30 percent of total annual



Centre stage: CEO Calabria and Chairman Gordon Cairns

East Coast demand. "We continued to make progress on plans to be a lower cost, globally competitive gas producer, including implementing a simpler, flatter, asset-led operating model," he said.

"We also reduced well costs by lowering overheads, improving surface facilities design and re-pricing rig and construction contracts," added Calabria.

He told shareholders that the APLNG plant's feed-gas reserves increased on the back of improved recovery estimates from operated areas.

Outside of APLNG, Origin continued to pursue opportunities to bring on new sources of gas supply.

Origin has entered into early project planning, or front-end en-

gineering and design, for a stage one development of the Ironbark coal-seam gas project in the Surat Basin in Queensland.

"We are assessing our strategic options for Ironbark which will determine the optimum pathway to bring the gas to market while delivering the best overall value to Origin," said Calabria.

"We are also continuing our highly prospective exploration and appraisal in the Beetaloo Basin in the Northern Territory," he added.

"Following a thorough scientific inquiry into hydraulic fracturing, the Northern Territory Government lifted its moratorium on onshore production earlier this year," he explained.

France-South Korea sign accord on maritime LNG fuel tank technology

French LNG storage technology company GTT and Dongsung Finetec, a South Korean thermal insulation maker, have signed an accord for joint venture production during the Paris visit of a trade delegation accompanying South Korean President Moon Jae-In.

Both companies said a memorandum of understanding was signed for the commercial development of GTT technology called LNG Brick and comprising integrated storage tanks with capacity below 3,000 cubic metres and suitable for vessels using LNG as propulsion fuel.

The GTT-Dongsung Finetec agreement was signed at the

France-Korean business summit also attended by Bruno Le Maire, the French Minister of Economy and Finance.

"GTT and Dongsung Finetec wish to promote the innovative and promising LNG Brick for LNG fuel applications," they said.

"LNG Brick will eventually be built by Dongsung Finetec and will be outfitted on a large range of commercial vessels such as container vessels and bulk carriers and roll-on-roll ships," they added.

GTT and Dongsung said that they shared the same understanding and analysis regarding the future use of LNG in the marine fuel market.

"With the entry into force of the global sulphur cap in January 2020, limiting sulphur emissions to 0.5 percent and considering the solid economics of LNG, the two companies view this new market in LNG-fueled vessels as very promising" they explained.

GTT has developed the LNG Brick technology based on its Mark III tank technology to offer a cost-effective and competitive solution for LNG fuel tanks.

Dongsung has already been closely associated in its industrialisation through the construction of a prototype.

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NEWS NUDGES

Tohoku LNG agreement

Tohoku Electric, the Japanese utility with 7.6 million individual and corporate customers in six prefectures on Honshu Island, said it signed an agreement to receive cargoes from the onshore Mozambique LNG export project in southeast Africa being developed by US company Anadarko Petroleum with feed-gas from the Area 1 licence block of the Rovuma Basin. The deliveries will amount to 280,000 tonnes per annum for 15 years from the start of 2020s. The shipments will be on a delivered basis whereby the price includes the shipping costs. Anadarko has a 26.5 percent stake in Mozambique Area 1 and Japanese trading house Mitsui holds 20 percent.

BHP LNG and gas update

BHP Billiton, the commodities company with substantial oil and gas assets, said its natural gas output rose by 5 percent in the quarter to 112 billion cubic feet, reflecting increased volumes in Trinidad, an LNG producer. It also has a 17 percent stake in the oldest Australian LNG export plant, the Northwest Shelf facility in Western Australia, operated by Woodside and said that the Greater Western Flank project to extend LNG production at that facility was now 95 percent complete. BHP is also selling its onshore US shale assets.

Indian gas pricing

The Indian Ministry of Petroleum and Natural Gas has fixed its latest half-year ceiling price for domestic natural gas output for the period from October 2018 to the end of March 2019 at US\$3.36 per million British thermal units on a gross calorific value (GCV) basis.

ABS holds key China talks in Xiamen covering LNG and ship fuel issues

LNG Journal editor

The American Bureau of Shipping, the US classification society, has held its annual China and Hong Kong business gathering at Xiamen port city on China's southeast coast at which the main issues were LNG fuel and the International Maritime Organization's sulfur cap for shipping.

ABS said its annual China gathering brought together industry leaders to discuss "global challenges" facing the maritime sector.

Strategies

The group heard strategies to meet the IMO 2020 sulfur cap, as well as a look ahead to 2030 when vessel data will play a significant role in compliance management.

"ABS has become the classification organization of choice for the Chinese shipbuilding and shipping industry, with a long track-record of working closely together on innovative projects in both marine and offshore," said Tony Nassif, ABS Executive Vice President and Chief Operating Officer.



Participants in ABS industry meeting at Chinese port

"The China and Hong Kong Committee enables ABS to bring together the diverse expertise of many knowledgeable stakeholders to continue to address the industry's complex challenges," added Nassif.

Committee members come from ABS as well as ship owners, operators, charterers and representatives from flag administrations, owner associations, as well as the shipbuilding and insurance sectors.

ABS also presented its work with industry partners on digital technologies, designed to improve delivery of classification services for clients.

"ABS is working at the forefront of leveraging new technolo-

gies and unique designs, with companies across China and Hong Kong, on innovative projects from dual-fuel applications, to very large ethane carriers and LNG-powered vessels, to novel FSRU and subsea production technology systems," explained ABS Senior Vice President for Eastern Hemisphere Operations, Eric Kleess.

"Serving the world's largest shipbuilding nation gives us the opportunity to engage with industry and clients, offering guidance and expertise, while also forging novel solutions to help solve industry complexities," added Kleess.

Spanish LNG operator Enagas posts profit and reports pipeline progress

Enagas, the Spanish natural gas network operator and LNG terminal owner, posted a third-quarter net profit of 106 million euros (\$122.7M) as domestic industrial demand for natural gas edged higher, while it also reported progress on Europe's Southern Gas Corridor venture.

The owner of four LNG regasification plants in Spain and two in South America said its third-quarter earnings took the Enagas nine-month total to a net 325.7 million euros (\$377M), around 1 percent higher than the same period a year ago.

The company operates 11,000 kilometres of high-pressure gas pipelines in Spain and 19 compressor stations and said domestic

demand for natural gas grew by 1.7 percent in the first nine months of 2018.

"This was mainly due to the good performance of industrial consumption, which represents 60 percent of total demand," said Enagas.

In its international operations, Enagas said it invested 153.6M euros in the first nine months of the year, mainly in the Trans Adriatic Pipeline (TAP) project in which the company has a 16 percent stake.

The overall project is almost 80 percent complete and is part of the Southern Gas Corridor to link the Trans-Adriatic Pipeline to the Trans-Anatolian Pipeline from the Caspian Sea to near the Turkish-Greek border.

The pipeline will then cross Greece and Albania and the Adriatic Sea before coming ashore in Southern Italy to compete with European LNG shipments.

Enagas has four domestic import terminals around Spain at Barcelona in the northeast, Cartagena in the southeast, Huelva in the southwest and Gijón in the northwest.

Enagas noted that during the third quarter, the company along with Belgian network operator Fluxys, reached an agreement for the sale of their joint stake in Sweden's transmission system operator Swedegas to the First State Investments equity fund for 1.02 billion Swedish crowns (\$114.5M).

Egypt winds down floating LNG import charters amid revised strategy for natural gas sector

LNG Journal editor

Egypt is winding down its floating storage and regasification unit contracts for LNG imports as the Arab nation's natural gas crisis has eased with the discovery and development of new offshore gas fields in the East Mediterranean and the Nile Delta.

Before the discovery of the giant Zohr field in the East Med, Egypt was forced to import LNG from 2015 to two FSRUs deployed at the port of Ain Sokhna on the Gulf of Suez.

Exports to rise

The Egyptians are halting LNG imports and are even seeking to have regular exports of LNG from facilities such as the re-started Idku liquefaction and export plant, just east of the port of Alexandria.

Hoegh LNG Holdings has now agreed with Egypt Natural Gas Holdings Co. (EGAS) to amend the time charter of the FSRU "Hoegh Gallant".

"Under the amended contract, the 'Hoegh Gallant' will be chartered as an LNG carrier to a third party, and Egas will compensate



'Hoegh Gallant' FSRU duties in Gulf of Suez port ended

for the rate difference between the original FSRU contract and the new LNG carrier time charter," explained Hoegh.

"The amended contract is expected to become effective in October 2018 and will run to April 2020, the termination date of the original five-year FSRU contract," added the Norwegian company.

As part of the original FSRU contract with EGAS, Hoegh LNG has certain equipment installed at the jetty at Ain Sokhna.

Hoegh said the book value of this equipment was around \$9 mil-

lion and since the market value and alternative use of such equipment was unclear, Hoegh expects to record an impairment for a corresponding amount in its third-quarter 2018 earnings.

"We are proud to have provided FSRU services to EGAS since 2015, during a period in which the 'Hoegh Gallant' regasification capacity was fully utilized, contributing strongly to balancing supply with demand in the Egyptian natural gas market," said Hoegh Chief Executive and President Sveinung J.S. Stohle.

"Under this amended contract we maintain our highly valued relationship with EGAS, which we hope to further expand in the future as Egypt emerges as a regional energy hub," added Stohle.

Egypt's gas crisis started during the "Arab Spring" social upheavals in North Africa and the Middle East in 2014 when it diverted natural gas supplies to meet growing domestic demand and to avoid power cuts.

However, the Idku LNG export plant re-started some exporting in 2017 under the operatorship of Royal Dutch Shell, which acquired original operator BG Group.

A second LNG export plant at Damietta has capacity of 5.5 million tonnes per annum of LNG and has two storage tanks of 150,000 cubic metres capacity.

Damietta is 80-percent owned by Union Fenosa Gas, a joint venture between Spain's Gas Natural, now known as Naturgy Energy Group, and Italian energy company Eni.

The remaining 20 percent belongs to EGAS and Egyptian General Petroleum Co.

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Kwispaa FLNG project in Vancouver files for permits

Steelhead LNG, the Canadian project developer, said its Kwispaa floating export venture proposed for Sarita Bay at Vancouver Island has filed for regulatory permits from the provincial British Columbia government and the federal authorities in Ottawa.

The Kwispaa FLNG venture has already provisionally ordered two hulls for production and storage from the Hyundai Heavy Industries shipyard in South Korea.

The project is being developed through a co-management relationship with the Huu-ay-aht First Nation.

The 475-hectare site provides natural deep water and is a short distance to open ocean for efficient access to market.

The final investment decision is scheduled for 2020 and the first phase of the project is expected to be operational by the end of 2024 and will provide capacity of around 12 million tonnes per annum of LNG with prospects of rising later to 24 MTPA.

"We are incredibly proud of the special co-management relationship that we have formed for Kwispaa LNG," said Huu-ay-aht Chief Councillor Robert J. Dennis Senior.

"We look forward to continuing to work together with Steelhead throughout the environmental assessment process to ensure that this project achieves world-leading outcomes for the environment and our people for generations to come," he added.

Steelhead plans to liquefy natural gas sent through underground pipelines to its FLNG hull and to export to Asian markets.

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.

Cheniere set to start two new Trains and is confident on China trade

LNG Journal editor

Cheniere Energy Chief Executive Jack Fusco has provided a positive growth outlook for US liquefied natural gas exports to Asian markets, including China, during an energy forum at Rice University in Houston, Texas, and said LNG would be produced soon at the two newest Cheniere processing Trains.

The Cheniere CEO said he was confident about the prospects for US LNG exports even amid market uncertainties and US trade tensions with China.

On stream

He also stated that Cheniere expected to begin producing LNG shortly from the fifth liquefaction Train at Sabine Pass, taking overall output to 22.5 million tonnes per annum with one more Train expected to be built at the facility.

Cheniere is also constructing a second export plant at Corpus Christi in Texas and is making progress towards putting the first Train on stream. Both were originally scheduled to produce LNG before the end of 2018.



Corpus Christi plant is putting first Train on stream

Fusco said that the Sabine Pass Train 5 was continuing with its commissioning process.

"We should be making our first LNG there shortly on that Train," said Fusco.

"Corpus Christi Train 1 is also ahead of schedule and we will be making LNG there shortly. It's neck and neck to see which one will produce first," he stated.

Fusco also noted that Cheniere had signed two long-term supply contracts with China National Petroleum Corp. (CNPC) in February 2018. The last Cheniere cargo shipped to China arrived at the start of September.

Under the sales deals with

Cheniere's subsidiaries, Corpus Christi Liquefaction and Cheniere Marketing, CNPC through its subsidiary PetroChina would purchase around 1.2 million tonnes per annum of LNG.

Houston-based Cheniere said a portion of the supply would begin in 2018 and the balance in 2023.

"They signed a 25-year contract," said Fusco of the Chinese contract.

"They have an all-in cost that's less than \$8 per MMBtu. The Japan, Korea price marker (JKM) is trading at \$12. They are going to lift (cargoes) all day," stated Fusco.

KBR subsidiary in UK wins first phase of project work for Senegal-Mauritania

KBR said its UK subsidiary was awarded a front-end engineering design contract by BP of the UK for the first phase of the Tortue natural gas field development located on the maritime border between Senegal and Mauritania that will provide feed-gas for at least two floating LNG export projects.

"The agreement contains a mechanism to allow transition of the contract to an engineering, procurement and construction management (EPCM) contract at a later date," said KBR.

The Greater Tortue project is aiming for first gas in late 2021 and is being developed by BP in

partnership with the independent Dallas, Texas-based exploration and production company Kosmos Energy.

Golar LNG, the Bermuda-based fleet operator and project company, has signed a preliminary charter agreement on the provision of at least one floating LNG production hull for the Senegal-Mauritania venture.

BP and Kosmos have estimated that the Tortue field has resources for LNG production of around 25 trillion cubic feet of feed-gas and an additional 15 Tcf is contained in nearby fields.

KBR said that under the terms

of its contract, the US company's Granherne unit in the UK would provide management of the quarters and utilities and the provision of supplemental services for the LNG hub in Senegal and Mauritania.

The US company said the FEED work was to be performed up to the end of 2018 to support the final investment decision.

"We are proud to continue to be part of this significant project providing this technical assurance and facilities integration role to BP," said Jay Ibrahim, KBR President for energy projects outside of the US.

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Next wave of US Gulf Coast LNG developers takes shape as Louisiana project builds team

LNG Journal editor

TechnipFMC, the energy and LNG engineering company, has agreed an initial services contract for a US LNG export plant proposed for the west side of the Calcasieu Ship Channel near Johnson Bayou in Louisiana as part of the next wave of facilities planned for the Gulf Coast.

A company called Commonwealth LNG has signed up TechnipFMC for its planned liquefaction plant with capacity for 8.4 million tonnes per annum.

Marine facilities

Commonwealth added that it had also signed an agreement with Lloyd Engineering for a marine facility and turning basin design.

"With the Maritime Pilots Institute in Covington, Louisiana, the

FERC ESTIMATES THE COST OF THE FOUR SEGMENTS IN THE VALUE CHAIN ARE:

Exploration & Production:	\$0.90/MMBtu +/- \$0.30
Liquefaction:	\$1.10/MMBtu +/- \$0.20
Shipping:	\$1.15/MMBtu +/- \$0.65
Storage & Regasification:	\$0.50/MMBtu +/- \$0.10
Total Cost:	\$3.65/MMBtu +/- \$1.25

Federal Energy Regulatory Commission's LNG data

group completed simulations and then subsequently prepared a draft Water Suitability Assessment," said Commonwealth in reference to a stage in the permit process.

Commonwealth said that TechnipFMC and Lloyd Engineering are working collaboratively with US LNG and energy consultants CH-IV, who will manage the development of the formal Federal Energy Regulatory Commission (FERC) application for the facility with six liquefaction Trains.

Commonwealth stated that it intends to file its formal applica-

tion with the FERC in March 2019.

"The strength of our team lies not only in the diverse LNG experience of our executive management, but also with the industry-leading partners we have chosen for this development," said Commonwealth's Chief Executive Paul Varello.

"Commonwealth will achieve its goal of being the low-cost provider for the next wave of US LNG liquefaction projects," added Varello.

The Commonwealth project would consist of eight separate sets of facilities, including a 3.7-mile-long natural gas receiving

pipeline, extending from existing pipelines, according to pre-filing statements.

There would also be four gas pre-treatment units and small-scale liquefaction Trains and storage tanks.

The adjacent electric plant would be powered by an 80-megawatt gas turbine and there would be boil-off gas handling systems and other utilities.

The marine berth would have the size to accommodate LNG carriers with capacity up to 215,000 cubic metres.

The Commonwealth project developers had also said earlier in 2018 that the Japanese bank Sumitomo Mitsui Banking Corp. would act as its financial advisor to help raise capital and advance the venture.

US Pointe LNG advances as second export facility proposed for the banks of Mississippi River

US regulators have started the pre-filing environmental review process for the Pointe LNG liquefaction project proposed for the East Bank of the Mississippi River in Plaquemines Parish in Louisiana, which would be the second river-bank export facility planned for south of New Orleans.

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.

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.

"We believe that beginning the Commission's review of this proposal prior to the receipt of your application will greatly improve our ability to identify issues early and address them in our environmental document," said the FERC in its letter to Pointe LNG.

Two US Gulf Coast energy veterans, former Duke Energy executive Jim Lindsay and former tanker captain Tom Burgess, filed their request to the FERC in September and have now received their reply.

"As stated in your letter, Pointe LNG plans to construct an LNG facility on the East Bank of the Mississippi River at a site which

encompasses the previously planned Mississippi River LNG Project," stated the FERC.

The FERC was referring to the fact that 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 a riverbank project.

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

"Your letter also stated that Pointe LNG intends to file an application no later than November 2019," noted the FERC.

"When Pointe LNG files its application with the Commission, we will evaluate the progress made during the pre-filing process, based in part on your success in resolving the issues raised during

scoping," explained the regulator.

"Once we determine that your application is ready for processing, we will establish a schedule for completion of the environmental document and for the issuance of all other federal authorizations," it added.

A second export project is planned by another company, Venture Global, for the same area of Louisiana but on the opposite bank of the Mississippi.

Venture Global is proposing its Plaquemines LNG plant to be constructed on 630 acres near river mile-marker 55 on the West Side of the Mississippi, 30 miles south of New Orleans.

Lyndsey and Burgess bring a lot of energy industry experience to their 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.