LNG Unlimited

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Ophir Energy CEO regrets delay in Equatorial Guinea's Fortuna FLNG

Final investment decision still awaited with all other aspects of floating production plan in place

LNG Journal editor

Ophir Energy Chief Executive Nick Cooper expressed regret that the UK exploration and production company had been unable to meet its schedule for a final investment decision on the Fortuna floating LNG project planned for offshore the West African state of Equatorial Guinea.

Cooper made his statement in the annual earnings of Ophir that saw revenues increase by 76 percent to $189 million compared with $107M the previous year.

Targets

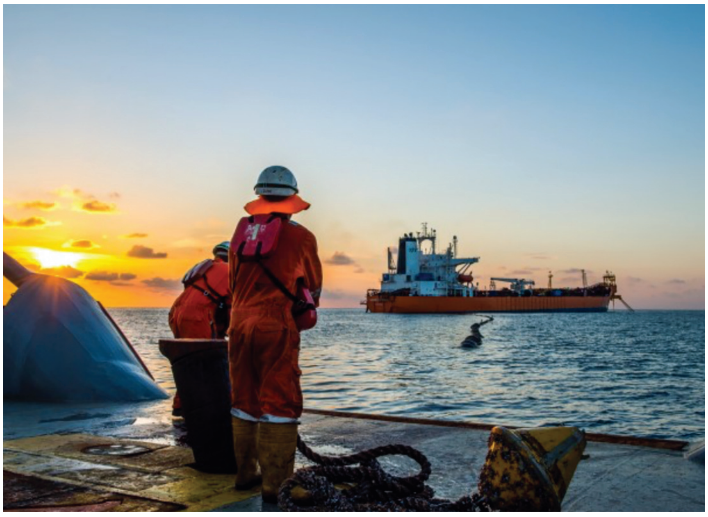
Ophir said that the completion of project financing on the Fortuna project had taken longer than expected, but all other targets for the joint venture were achieved in 2017.

These included the signing of an overall development agreement, the nomination of a preferred supplier for the LNG offtake and the award of upstream and midstream construction contracts.

Cooper said that Ophir had taken important steps to adapt its own business to meet key operational targets and to replenish its exploration portfolio.

"Nevertheless, we are disappointed to have not yet achieved the Fortuna project FID despite having made significant progress on the project," he added.

The CEO explained that rebalancing of the portfolio and capital expenditure prioritisation away from its prior primary exploration focus has seen Ophir approach sustainability.



UK company has operations in Africa and Gulf of Thailand

Ophir and OneLNG, a joint venture between Bermuda-based Golar LNG and global energy services company Schlumberger, have established a joint operating company to develop the Fortuna FLNG venture using Golar's floating hull technology.

OneLNG and Ophir have 66.2 percent and 33.8 percent ownership respectively of the LNG venture company.

Ophir also managed in late 2017 to agree to a 12-month extension to the Block R exploration and production licence offshore Equatorial Guinea from where the feed-gas will come for LNG production.

The UK company and its partners had been involved last year in financing discussions with a group of Chinese banks.

The Fortuna FLNG project when completed will produce 2.5 million tonnes per annum of LNG from a converted hull of an LNG carrier to be deployed over the gas field.

Ophir, Golar, Schlumberger the Equatorial Guinea government have additionally signed an agreement nominating global commodities company, the Gunvor Group, as the main LNG buyer for the offtake.

Priorities

"Our 2018 priorities are threefold: to deliver the Fortuna project FID; to further monetise our significant contingent resources; and to grow production and cash flow," said Cooper.

Ophir operates a long-life, low-cost production base and has a strong balance sheet with other assets, particularly the producing Bualuang and Kerendan fields in Indonesia.

"We sanctioned a fourth phase of development on our Bualuang oil field which will grow production in 2018-19, agreed an increased gas price on our Kerendan field and are in negotiations to double production from this asset by 2020," the company stated.

■

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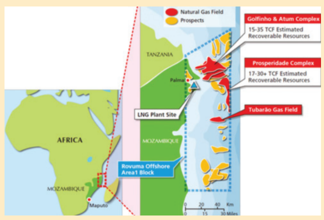

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US Coast Guard approves St Johns River in Florida as suitable for LNG container traffic

LNG Journal editor

The US Coast Guard has approved the St Johns River in Florida as suitable for liquefied natural gas marine container traffic from the Jacksonville export terminal proposed by Eagle LNG Partners.

The Coast Guard's opinion was sent to the US Federal Energy Regulatory Commission as part of the permit process for the Eagle LNG development.

St Johns River inlet in Florida to welcome LNG containers

Three Trains

The proposed project consists of three small-scale liquefaction Trains capable of producing up to 1.65 million gallons of LNG per day, the equivalent of around 1 million tonnes per annum.

"The LNG will be transported to markets in the Caribbean and Latin America for power generation, and to local and regional markets," according to the permit application.

The LNG would be shipped in containers on board cargo ships rather than on large-scale carriers.

Eagle LNG submitted a formal filing for the project to the FERC in the first quarter of 2017.

The construction is preliminarily scheduled for the first half of 2018 and start-up and commissioning is likely by the end of 2019.

A letter of recommendation was sent to the FERC as part of the advance of the Eagle project towards receiving full permits.

"It conveys the Coast Guard's recommendation on the suitability of the St. Johns River for LNG marine traffic as it relates to safety and security.

"The review focused on the navigation safety and maritime security aspects of LNG vessel transits along the affected waterway.

"Our analysis included an assessment of the risks posed by these transits and possible risk management measures," said the Coast Guard.

"During the review, we consulted a variety of stakeholders, including members from the Jacksonville Port Authority, the Jacksonville Marine Transportation Exchange, the St. Johns Bar Pilot Association and the Florida Docking Masters Association," it added.

The Coast Guard said it additionally sought the opinions of the owners of the neighboring facilities to the Eagle's export terminal and the Jacksonville Fire and Rescue Department.

Eagle said it would receive natural gas by pipeline at its plant and liquefy it, temporarily store the produced LNG and periodically load LNG onto ocean-going vessels.

The LNG would be exported to nations in the Caribbean who currently use heavy fuel oil or diesel for power generation and would also be sold to shipping companies for use as marine fuel.

The project will occupy a 194-acre parcel of land that is zoned for industrial activity and in an area that currently hosts other bulk fuel terminals.

The proposed facility will receive natural gas transported by a local utility through existing and expanded pipelines located adjacent to the Jacksonville project site.

Eagle LNG will also procure electric power from the Jacksonville Electric Authority. ■

Papua New Guinea LNG plant to shut for eight weeks with cargoes delayed for Japan and China

Papua New Guinea LNG plant stakeholder Santos of Australia said the facility and its associated infrastructure would be closed for around eight weeks to complete repairs and restore production following the February 26 earthquake in the Southern Highlands and Hela Provinces of the Oceania nation.

The ExxonMobil-operated PNG LNG production facility recently logged an annualized output rate of 8.6 million tonnes per annum and mainly supplies Japan, China and Taiwan.

The plant has two storage tanks each with 160,000 cubic metres of capacity and was built with nameplate production of 6.9MT, benefiting from various upgrades and de-bottlenecking since the start-up in 2014.

“Santos is deeply saddened by the loss of life and personal injury suffered by communities in Papua New Guinea," said the company

“PNG LNG expertise and resources have already been deployed to assist the humanitarian relief and recovery effort, including assessing impacted communities and delivering immediate resource needs,” added Santos.

Santos has a 13.5 percent interest in PNG LNG which is one of Santos’s five core long-life natural gas assets.

The other stakeholders in addition to ExxonMobil are the Australia-listed company Oil Search as well as French energy company Total, Japan’s JX Nippon Oil & Gas Exploration and the PNG government.

All the companies have contributed sums amounting to more than US$2 million towards the relief efforts. Recovery work at the Hides Gas Conditioning Plant is focused on restoring services that provide feed-gas for the liquefaction plant, located northwest of the capital Port Moresby.

“While the plant is safely shut in, there has been some damage to various pieces of equipment and foundation supports that is yet to be fully inspected and repaired,” said Santos.

ExxonMobil said it would take advantage of the forced shut-down to bring forward previously scheduled maintenance programmes at the liquefaction plant.

This means the main customers will have delayed deliveries of LNG. The long-term supply contract holders are China Petroleum and Chemical Corp, known as Sinopec, the Japanese utilities Tokyo Electric Power Co. and Osaka Gas and China Petroleum Corp. of Taiwan.

ExxonMobil and the other plant owners are likely to have invoked the "force majeure" clause in the contracts that allows for delays because of natural disasters.

“Initial visual inspections of the major processing equipment indicate they have not been significantly impacted,” said Santos.

“Production wells remain safely shut in. A detailed inspection of some well pads has been hampered due to earthquake-related impacts to the roads. It is hoped this work can be completed within the next week,” added Santos. ■

Flex LNG swap deal renewed as CEO ups shares

Flex LNG, the Oslo-listed shipping and projects company backed by funds controlled by Norwegian shipping magnate John Fredricksen, said Chief Executive Jonathan Cook has bought a new parcel of shares.

Cook purchased 25,000 shares in Flex at 11.31 Norwegian crowns ($1.45) per share as Fredricksen's Geveran Trading renewed a share swaps agreement, according to statements from the Oslo stock exchange.

Following the share transaction by Cook, the CEO owns 35,000 shares in Flex.

Additionally, a statement from the exchange said Geveran Trading, the company indirectly controlled by trusts established by Fredriksen for the benefit of his family, has settled Total Return Swap (TRS) agreements underlying 810,000 shares in Flex that expired on 6 March 2018.

Geveran subsequently entered into a new TRS agreement for the same amount of shares with a new expiry date of 6 June, 2018.

"Geveran's affiliated ownership in Flex LNG following this transaction unchanged 191,131,803 shares, constituting 51.94 percent of the issued share capital," it added.

Flex had reported fourth-quarter revenues of $7.9 million compared with $9.8M in the previous quarter.

During the three months, it operated two chartered-in LNG carriers to build a market presence.

In January, Flex took delivery of the first two of six newbuilds and secured a 15-month to 18-month time-charter for one of the vessels.

LNG storage company GTT tests compact technology successfully

LNG Journal editor

CEO Philippe Berterottiere is expanding product ranges

Gaztransport and Technigaz (GTT), the French LNG maritime storage tank and technology supplier, said it had successfully ended the test phase for a compact and small-scale solution that can be installed in a ship's structure.

GTT said its equipment comprises a Mark III membrane system and is delivered as a block ready to be installed on a vessel.

The new GTT system is being marketed under the name "LNG Brick" and provides LNG fuel tanks for capacities ranging between 1,000 cubic metres capacity and 3,000 cubic metres capacity.

Off-site

The French company said that it would also permit the construction of the compact LNG tank elsewhere than at the shipyard which could then integrate it into an LNG-propelled vessel.

GTT explained that the new technology will also enable easier management of boil-off gas for small volumes because of its ability to maintain a higher pressure than traditional membrane tanks.

GTT said it had entrusted Dongsung FineTec, a Korean company specialising in the production of insulation panels used for GTT's technologies, with the creation of a prototype.

The tests were carried out under cryogenic conditions and according to GTT have demonstrated the satisfactory performance of this new system.

"We are pleased to be able to expand our range of membrane containment systems with this reliable, high performance solution," said Philippe Berterottiere, Chairman and Chief Executive of GTT.

"Given the current economic environment and LNG price levels, it seems to us to be an appropriate answer to address many of our customers' concerns," added Berterottiere.

GTT in February 2018 said it received orders in the first quarter covering equipment for three LNG carriers, as well as the bunkering vessel being built for France's Total and Japanese shipping company Mitsui OSK Lines.

The three LNGCs, offering capacities ranging from 174,000 to 180,000 cubic metres, will be built at Samsung Heavy Industries and Hyundai Samho Heavy Industries in South Korea.

They will be fitted with GTT's Mark III Flex membrane containment system and deliveries are scheduled for 2020.

Stabilis Energy acquires distributor to broaden offering as LNG supplier

Stabilis Energy, the US liquefied natural gas producer and supplier, said it had completed the acquisition of a majority interest in Prometheus Energy, a small-scale US LNG distributor.

Stabilis, based in Beaumont, Texas, did not disclose the value of the transaction.

Under the acquisition agreement, Prometheus will operate as the independent LNG distribution subsidiary of Stabilis.

Stabilis provides LNG to heavy-horsepower users of diesels and crude-based fuel in the oil industry.

The company opened its 120,000 gallons per day LNG production facility in George West, Texas, in January 2015 to service industrial and oilfield customers in Texas and the greater Gulf Coast region.

"Prometheus provides mobile and stationary LNG solutions to industrial, utility, pipeline, high-horsepower and other remote customers," said Stabilis.

Stabilis said that Prometheus would continue to purchase LNG from multiple producers to optimize fuel cost for its customers.

"We are pleased to announce the acquisition of Prometheus Energy," said Casey Crenshaw, Chief Executive of Stabilis.

"Prometheus was a pioneer in the LNG industry and it remains the premier small-scale LNG distribution and service company in the world," added Crenshaw.

"We believe this transaction will allow each company to grow aggressively in LNG production and distribution, respectively," he stated.

Jim Aivalis, CEO of Prometheus, said his acquired company remains fully committed to its current customers and business model.

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NEWS NUDGES

ABB in US LNG deal

NextDecade Corp., the US developer of the Rio Grande LNG export project near the Brownsville Ship Channel in South Texas with 27 million tonnes per annum of planned output, has chosen Swiss-Swedish company ABB to provide automation and electrical systems. "NextDecade expects ABB's solutions to reduce the schedule, equipment footprint and cost of our Rio Grande LNG facility, while providing greater operational flexibility," said Matt Schatzman, the NextDecade President and Chief Executive.

Shell boosts US volumes

Royal Dutch Shell has agreed to double its liquefied natural gas purchase agreement with Washington DC-based Venture Global, taking the US developer closer to a final investment decision for one of its two projects in Louisiana. Shell is now committed to buying 2 million tonnes per annum of LNG as free-on-board cargoes for 20 years from the Calcasieu Pass project out of 10 MTPA of planned production. Venture Global has also signed a similar 20-year supply accord for 1 MTPA with Italian utility Edison.

Chevron LNG warning

Chevron Corp. said at its annual meeting with analysts in New York that it intended to deliver more cash and output in 2018. "Even with no commodity price appreciation, we expect to deliver stronger upstream cash margins and production growth," said Chief Executive Michael K. Wirth. "This is a powerful combination," added Wirth. Chevron said that natural gas was an increasingly global commodity with steady demand and ample supply capacity.

TMC of Norway to supply for four LNG-powered shuttle tankers

LNG Journal editor

Company's customers include leading LNG fleet operators

Tamrotor Marine Compressors (TMC), the Norway-based equipment supplier, has signed a contract with Samsung Heavy Industries to supply a marine compressed air system to four LNG-powered shuttle tankers the shipbuilder is constructing for Teekay Offshore.

TMC said it would deliver a complete compressed air system to each of the four shuttle tankers, including compressors as well as adsorption air dryers.

Samsung is building four Suezmax-size, shuttle tankers for Teekay Offshore.

TMC said the newbuild tankers will be constructed based on Teekay Offshore's new "Shuttle Spirit" design which incorporates proven technologies to increase fuel efficiency and reduce emissions, including LNG propulsion technology.

"Once on the water, they will be the most environmentally-friendly shuttle tankers ever built.

"The vessels will be delivered in 2019 and 2020 and provide shuttle tanker services in the North Sea," stated TMC.

TMC said it would make its first delivery in the third quarter of 2018. Contract values were not disclosed.

"Samsung Heavy Industries has selected TMC's compressors for a wide range of newbuild vessels in recent years, for a number of different end-clients," said Hans Petter Tanum, TMC's director of sales and business development.

"It is fantastic to be asked to be involved with these environmentally ground-breaking shuttle tankers too," added Tanum

TMC, whose headquarters are in Oslo, is the world's leading supplier of compressed air systems for marine and offshore use.

It previously signed a contract with Samsung to supply a marine compressed air system to a newbuild floating storage and regasification unit ordered by Hoegh LNG.

Under that contract, TMC will deliver a complete marine compressed air system consisting of two 44-kilowatt service compressors and two 44-kW control air compressors.

European LNG terminal owners raise UK Interconnector stakes

European natural gas pipeline and LNG terminal companies, Fluxys of Belgium and Snam of Italy, have agreed to buy the one-third stake held in Interconnector UK, the bi-directional pipeline linking the UK to Belgium and the Continent, from a Canadian fund.

Fluxys, the Belgian transmission network operator and owner of the Zeebrugge import terminal and Snam, its Italian equivalent and owner of the Panigaglia LNG terminal near the Italian port of Genoa, will purchase a 33.5 percent stake owned by the Quebec fund, Caisse de depot et placement du Quebec (CDPQ).

Fluxys and Snam exercised their proportional pre-emption right on the CDPQ stake when it was offered for sale.

"The transaction enables CDPQ to converge the management of its stake in Interconnector UK into its 20 percent partnership in Fluxys," said the Belgian company.

Fluxys put the value of the transaction at around US$103 million.

Once the share transfer is completed, Fluxys and Snam, with a 76.32 percent and a 23.68 percent stake respectively, will be the sole ultimate shareholders in Interconnector UK.

"As the initial long-term capacity contracts for the Interconnector pipeline are set to expire in October 2018, the company is preparing for a new market environment in which short-term contracting and commercial flexibility take center stage," stated Fluxys.

Fluxys and Snam also recently joined forces with Spain's Enagas to try and build up more European natural gas assets by bidding for a major stake being sold by the Greek government in Greece's natural gas grid operator DESFA.

Greece received two binding bids for a 66 percent stake in DESFA being offered by the Greek privatization agency as one of the conditions for the European Union nation's international financial bail-out.

The second bidding group comprises the Spanish owner of the Mugardos LNG terminal in northwest Spain, Regasificadora del Noroeste (Reganosa), Romanian gas network owner Transgaz and the European Bank for Reconstruction and Development.

A share purchase agreement and a shareholders' agreement for DESFA are scheduled to be signed by April 2018 for the sale to be concluded by June, clearing the way for further international funding of the Greek government.

Australian regulator allows LNG operators to coordinate maintenance plans despite issues

LNG Journal editor

Operators of liquefied natural gas plants in Western Australia and the Northern Territory have been authorised by regulators to coordinate maintenance activities at their liquefaction facilities even as there would be some competition consequences.

The Australian Competition and Consumer Commission has authorised the Gorgon, Wheatstone, North West Shelf and Pluto plants to coordinated maintenance along with the future Ichthys LNG project and the Prelude floating LNG venture.

Newest Australian plant Wheatstone in Pilbara region

Producers

"The four LNG producers compete for a limited pool of skilled contractors and specialised equipment to conduct scheduled maintenance," the ACCC explained.

"LNG producers can now schedule maintenance together without risking breaching competition laws, reducing concurrent work at their facilities," added the regulator.

"This will improve efficiency and maximise LNG production," it said.

The companies involved include Chevron Corp for Gorgon and Wheatstone, Woodside Petroleum for North West Shelf and Pluto, Inpex Corp of Japan for Ichthys near Darwin and Royal Dutch Shell for the Prelude FLNG venture offshore northwest Australia.

Some of the Australian LNG plants also supply, or have the ability to supply, natural gas to wholesale domestic markets.

When the LNG facilities are offline for maintenance, some gas may be directed to these wholesale markets.

"If producers become aware of each other's LNG facility shutdowns as part of this agreement, this information might give them an advantage in gas trading markets," said ACCC Chairman Rod Sims.

"To address this, the ACCC has imposed a condition of authorisation requiring the LNG producers to publicly disclose maintenance schedule information that they share with each other.

"A similar condition applies under an authorisation granted to LNG producers in Queensland in 2016," added the ACCC Chairman.

"Information is a crucial component for creating efficient, well-functioning markets. Market-sensitive information disclosed to competitors as part of this process should be available to all participants," said Sims.

Authorisation is granted for five years, rather than the 10-year period sought by the LNG producers.

"With the evolving nature of the gas markets, there is significant uncertainty about the impact of the proposed conduct on related markets.

"If the parties wish to seek reauthorisation in 2023, the ACCC will test whether the expected benefits and detriments have arisen and to assess the effectiveness of the conditions," added Sims.

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TransCanada starts open season on Nova gas pipeline

TransCanada Corp., the Canadian and North American pipeline and infrastructure operator, has launched a new open season on its Nova Gas Transmission Ltd. (NGTL) system expansion for binding capacity commitments at the Empress-McNeill export delivery point onward to the US border for volumes formerly expected to be shipped as LNG from British Columbia to Asia.

The open season is for an estimated 280 million cubic feet per day of firm service commencing in November 2021.

This capacity offering follows a successful open season that was completed in January 2018 for 1.0 Bcf/d of expansion capacity at the same delivery point, with service commencing between November 2020 and April 2021, and underpinning a recently announced $2.4 billion NGTL System expansion.

"This earlier open season was over-subscribed and industry has expressed strong interest for additional market access," said TransCanada.

The company said this new open season will close on March 15, 2018.

TransCanada is facilitating economic access for their natural gas to key export markets, including access to Eastern Canada and the US Northeast through TransCanada's Canadian Mainline and downstream systems.

The NGTL has already executed contracts for incremental firm receipt service totaling 620 million cubic feet of natural gas per day beginning in April 2021.

These contracts will connect new supply in the low-cost Montney shale-gas of northeast British Columbia that was formally expected to be transported to LNG projects on the Pacific Coast such as those previously planned by companies like Petronas of Malaysia.

Myanmar expects to begin LNG imports by 2020 for power projects

LNG Journal editor

Myanmar needs LNG as it exports its own gas by pipeline

Myanmar is expected to begin importing liquefied natural gas by 2020 using floating storage and regasification units to supply three gas-fired power plants already under development.

The government has recently given the go-ahead for the three power projects that will run on regasified LNG.

Three tendering processes are at varying degrees of completion by three groups constructing the power plants.

One gas-fired plant will be built by a joint venture comprising French energy company Total and Germany's Siemens.

The 1,230-megawatt plant will be in the southern region of Tanintharyi.

A second plant will be located in Yangon and is being constructed by TTCL Public Company of Thailand and Japan's Toyo Engineering with an LNG import facility included.

The third project involves Chinese power company Zhefu Holdings and Myanmar's Supreme Trading Co. and involves a 1,350MW plant in the coastal region of Ayeyarwady.

Myanmar has been a major natural gas producer since offshore fields were discovered in the 1990s.

Despite having an estimated 18.7 trillion cubic feet of natural gas reserves, less than 30 percent of Myanmar's population has access to electricity.

The government is acting because the current low level of electrification and unreliable power supplies are hindering foreign investment and the development of domestic businesses.

Most of Myanmar's own natural gas resources are currently exported by pipeline to neighbouring countries China and Thailand under long-term contracts.

This supply comes principally from the Yadama and Yetagun offshore gas fields.

Now electricity needs in Myanmar are expected to surge from 3,000MW to 8,000MW by 2025, leading to the development of the three gas-to-power projects and smaller ventures as well.

Gas Authority of India broadens portfolio with start of US deliveries

Cheniere Energy, owner of the Sabine Pass LNG export plant in Louisiana, marked the start of regular LNG shipments to India with a ceremony for the first cargo departing under a long-term supply agreement.

Indian natural gas network operator and LNG importer, Gas Authority of India Ltd (GAIL), has a 20-year Sale and Purchase Agreement with Cheniere with cargoes being shipped to import terminals near Mumbai or elsewhere in Asia.

Cheniere President and Chief Executive Jack Fusco was at the event at Sabine Pass along with GAIL Chairman and Managing Director B.C. Tripathi and Indian Consul General Anupam Ray.

The LNG supply agreement was signed in December of 2011 when India was only building its LNG and gas infrastructure and took effect on 1 March 2018.

Under the terms of the accord, Cheniere will make available for delivery to GAIL up to 3.5 million tonnes per annum of LNG.

"The commencement of this agreement marks the start of a long and productive relationship between Cheniere and GAIL," said Fusco.

"India remains an important market for LNG, and one that we hope will continue to show signs of growth," added the Cheniere CEO.

"We look forward to decades of mutually beneficial cooperation between Cheniere and GAIL, the leading natural gas company of India," added Fusco.

GAIL also has LNG contracts for deliveries from Qatar and Gorgon LNG in Australia as well as the newest US LNG export plant at Cove Point in Maryland.

Sabine Pass LNG shipments to GAIL will come from Train 4, now in full production, and which gives Sabine Pass 18 MTPA of output with two more Trains still to come on stream at the Louisiana facility.

GAIL Chairman Tripathi noted that his company was one of the foundation customers of Cheniere, having signed the contract seven years ago.

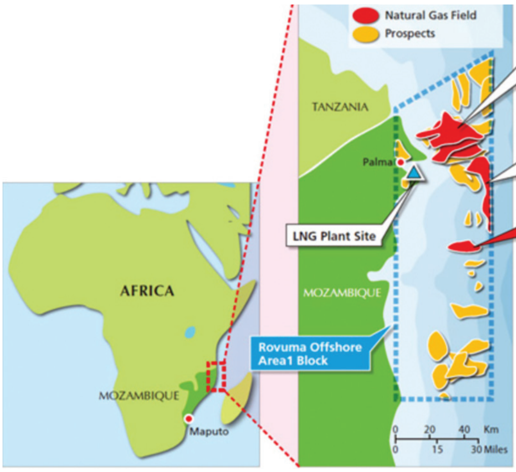
"With supplies commencing from the US, GAIL will have a diversified portfolio both on price indexation and geographical locations," said Tripathi.

Anadarko Petroleum says Mozambique has accepted its full LNG development plan

LNG Journal editor

Anadarko Petroleum Corp., the US energy company and main stakeholder in the planned onshore Mozambique LNG export plant in southeast Africa, said it received approval from the government for its gas fields development plan.

The US company said the go-ahead relates to the Golfinho and Atum fields in the Area 1 licence area of the offshore Rovuma Basin block in Indian Ocean waters.



Rovuma Basin licences are held by Anadarko and Eni

Resources

Anadarko said its plan includes the onshore liquefaction plant construction linked to reservoir resources and marked the recent "substantial progress" made on the joint venture.

The Anadarko-operated Mozambique LNG project will be the African nation's first onshore development, initially consisting of two Trains with total nameplate capacity of almost 12.9 million tonnes per annum of output.

The stakeholders in the other Area 4 licence area of the Rovuma Basin, led by Italian energy company Eni, are already advancing with their separate floating production project called South Coral FLNG.

Anadarko has a 26.5 percent stake in the Mozambique Area 1 and Japanese trading house Mitsui holds 20 percent.

Indian companies, including Bharat Petro Resources, ONGC Videsh and Oil India Ltd., hold a further 30 percent.

The Mozambican state energy company ENH has 15 percent of the licence and Thailand's PTT Exploration & Production has an 8.5 percent shareholding.

"We appreciate the support of the Government of Mozambique and are very pleased to achieve this critical milestone providing a further indication of the tremendous progress we continue to make on the project, which will position Mozambique as a strategic global LNG supplier," said Mitch Ingram, Anadarko Executive Vice President for International Operations.

"The approval of the Development Plan continues advancement toward a Final Investment Decision as it builds upon other recent achievements, including the announcement of our long-term Sale and Purchase Agreement with EDF, commencement of resettlement, and our ongoing work to secure project financing," he added.

Anadarko said that the foundation project paves the way for significant future expansion of up to 50 MTPA from offshore Area 1.

Anadarko disclosed on February 20 that it had signed its supply agreement with French utility Electricite de France (EDF) for a period of 15 years.

The US company said the accord was signed on behalf of the Area 1 licence shareholders and would amount to 1.2 MTPA of LNG.

The EDF deal takes portfolio sales to more than 5 MTPA.

Anadarko had earlier made progress in an agreed citizen resettlement process to prepare the onshore location for the construction of the liquefaction and export plant.

Argentine energy company YPF expects shale production to grow by a third as costs fall

Argentina, the world's second-largest holder of shale-gas resources after the US and currently an LNG importer, expects shale gas and oil production to grow 35 percent in 2018 as costs in its prolific and extensive Vaca Muerta Shale Basin continue to drop.

That was the view of the state-owned energy company Yacimientos Petroleiferos Fiscales (YPF) in an earnings presentation.

YPF reported a full-year profit of 12.7 billion pesos (US$627 million) compared with a 28.4Bln pesos loss in 2016.

The company said it planned to drill 100 wells in 12 different areas of the Vaca Muerta (Dead Cow) Shale in 2018, after drilling costs for horizontal wells fell to $1,390 per lateral foot in the fourth quarter compared with $2,270 in 2016 and $3,050 in 2015.

The company recently finished drilling its first 3,200-metre lateral well and in February 2018 shale-gas production in the 10,000-acre El Orejano area reached 5 million cubic metres per day.

The Vaca Muerta formation within the Neuquen Basin has similar geological properties to the US Eagle Ford shale play near the Gulf of Mexico in Texas in terms of its depth, thickness, pressure and mineral composition.

Argentina believes it is still on track to cease LNG imports as substantial shale-gas supplies from its estimated 308 trillion cubic feet of technically recoverable gas resources begin to flow in large quantities from the Vaca Muerta area by 2022.

Argentina is one of the few countries in the world after the US, Canada, China and to a limited extent Australia to commercially develop shale gas.

"YPF has a total acreage of close to 5.5 million acres, reaffirming the potential in Vaca Muerta is actually huge," said YPF Chief Financial Officer Daniel Gonzalez.

He said that YPF expected to start five exploration plays in the Vaca Muerta during 2018, one with Norwegian energy company Statoil.

Gutierrez also stated that YPF expected to name a new Chief Executive before the next meeting of shareholders scheduled for April 27.

A six-member committee has run the company since former CEO Ricardo Darre resigned in August 2017.

The Argentine government also plans to auction offshore oil and gas exploration rights in 2018 in the hope of developing fields off its Atlantic coast like those in neighbouring Brazil and to complement its efforts in onshore shale plays.

Since taking office in late 2015 the Argentine government of President Mauricio Macri has made investment in the energy sector a priority.

However, attention has mostly focused on the Vaca Muerta Shale rather than offshore exploration.