

LNG Unlimited

LNG JOURNAL PUBLICATION

23 March 2021

Chart Industries and two other US companies get go-ahead on FLNG

'Fast LNG' liquefiers to produce economic LNG for growing portfolio of NFE's terminals

LNG News Editor

Chart Industries, the US LNG equipment maker, and two other US engineering companies received a notice to proceed from New York-based LNG-for-power firm New Fortress Energy for the engineering work for a mid-scale LNG offshore liquefaction project with 1.4 million tonnes per annum of capacity.

NFE said the floating LNG production project was expected to be completed by the end of 2022.

Liquefaction

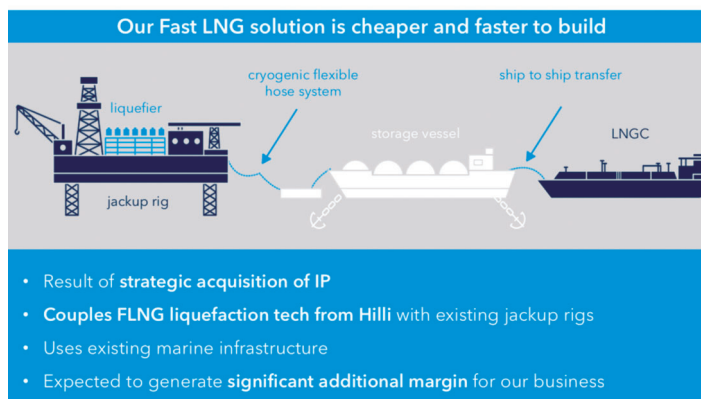
Chart said its content in the venture is valued at \$47 million and includes its patented ISPMR process technology, brazed aluminum heat exchangers, cold boxes, heavy hydrocarbon removal system and air-cooled heat exchangers, in addition to other pertinent equipment and engineering.

"We are excited to partner with New Fortress Energy on this unique, first-of-a-kind offshore liquefaction system," stated Jill Evanko, President and Chief Executive of Atlanta-based Chart.

"NFE continues to be an industry leader with a strategic approach to the clean energy transition and the entire value chain," stated Evanko.

NFE's notice to proceed also went out to Fluor Corp. of the US and Baker Hughes Co. for the construction of what NFE calls its "Fast LNG" project, which is expected to become operational in an estimated 20 months.

NFE has just made its final investment decision on the "Fast



NFE CEO Edens expects to produce LNG at \$3-\$4 per MMBtu

LNG" modular liquefaction facility to provide a low-cost supply of LNG for its growing customer base.

"The 'Fast LNG' design pairs the latest advancements in modular, midsize liquefaction technology with jack up rigs or similar floating infrastructure to enable a much lower cost and faster deployment schedule than today's floating liquefaction vessels," explained NFE in its fourth-quarter earnings just issued.

Under the NFE plan, a permanently moored Floating Storage Unit (FSU) would serve as an LNG storage facility alongside the floating liquefaction infrastructure, which can be deployed anywhere where there is abundant and stranded natural gas.

"Our innovative 'Fast LNG' liquefiers should allow us to produce LNG between an expected \$3-\$4 per million British thermal units for our growing portfolio of terminals around the world," said NFE Chief Executive and Chairman Wes Edens.

"This technology can be installed quickly and cheaply to access stranded, low-cost natural gas at a fixed price to meet the global demand for more affordable, reliable and cleaner energy," added Edens.

"Alongside our terrific partners, we look forward to deploying one of the world's lowest-cost LNG production facilities by 2022," he stated.

In its earnings, NFE reported fourth-quarter revenue of \$145.7 million, up from \$136.9M in the previous quarter.

NFE also narrowed its net losses in the quarter to \$500,000 from \$36M in the previous quarter to September 2020.

During the fourth quarter NFE noted in its earnings that it had announced separate transactions for \$5.1 billion enterprise value.

It acquired Hygo Energy Transition Ltd., which includes Brazil's largest thermal power plant and three operational or in-development terminals.

NFE additionally agreed to acquire Golar LNG Partners LP, which includes stable, contracted cash flows from 13 LNG vessels.

"Once released from current contracts, these vessels will serve as NFE's logistics backbone for terminal operations," said the US company.

NFE added that its LNG import projects in Mexico and Nicaragua were advancing and were expected to be operational this year.

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Japanese LNG buyer JERA to rebuild Chita gas-fired power plant units near terminal

LNG News Editor

JERA Co. Inc., the largest Japanese liquefied natural gas buyer with 35 million tonnes per annum of volumes and control of a fleet of 20 LNG carriers, has launched the environmental impact process for upgrading one of its key power plants at Chita in Aichi Prefecture.

JERA is Japan's biggest fossil-fuel generator being owned jointly by Tokyo Electric Power Co. and Chubu Electric, the two largest power companies.

Power network

The joint venture company currently operates and provides fuel for a total of 26 power plants in Japan and imports LNG into 11 of Japan's network of 37 terminals.

JERA's power plants have 70 gigawatts of capacity and the company is in the process of upgrading existing LNG and steam plants and also proposes to close its 2.2GW of coal-fired plants by 2030.

The current project for Chita in the Chubu region, whose capital is



New gas-fired units to be built and others decommissioned

Nagoya, is for the construction of new Units 7 and 8 at the plant which will use the most modern combined-cycle gas-fired plant technology to make more efficient use of LNG imports.

The new gas-fired plants are expected to come on stream in August and December 2027.

JERA is one of the world's largest LNG buyers and traders, taking volumes from leading global liquefaction plants.

In its plans for Chita, the older parts of the plants, units 1 to 5 with a combined 3,112 megawatts and using steam and LNG, are

being decommissioned over the next few years through fiscal 2026.

The new Units 7 and 8 will then operate alongside the existing Unit 6 gas-fired re-powering plant, giving combined capacity of 2,154MW.

"In order to reduce carbon-dioxide emissions, for new units 7 and 8 the plan adopts the latest high-efficiency combined-cycle power generation system (with gross thermal efficiency of approximately 63 percent)," said JERA.

"In addition, the environmental burden due to smoke and warm wastewater is expected to be lower when the plan has been

carried out than for operations at the existing facility," stated JERA.

JERA has submitted the Environmental Impact Assessment to Japan's Minister of Economy, Trade and Industry (METI), the Governor of Aichi Prefecture, the Mayor of Chita City and the Mayor of Tokai City, in accordance with the Environmental Impact Assessment Law and Electricity Business Act.

JERA said the documents would be made available for public review at the administrative agencies listed above and public meetings in the relevant areas are scheduled for the 26th March, 2021.

"People with opinions from an environmental conservation standpoint are invited to submit them via post or to drop them in boxes available at the public review locations," explained JERA.

"JERA will continue to move forward with the environmental impact assessment process, giving due consideration to the opinions of other stakeholders," it added.

Japan's LNG imports soar by over 21 percent as stock rebuild continues after high winter usage

Japan's liquefied natural gas imports soared by more than 21 percent last month, backed by a doubling of US supplies and more cargoes from Asia and Russia as stocks were rebuilt after the high winter season usage.

The February 2021 shipments amounted to 8.06 million tonnes, 21.5 percent higher than in February 2020 when they had amounted to 6.64MT, according to the preliminary figures from the Ministry of Finance.

The shipments equalled the volume received in January 2021 of 8.06MT, or around 118 cargoes, which had been an increase of 7.3 percent on January 2020.

Annual shipments of LNG to the Japanese import network of 37 fa-

cilities came to 74.46MT in 2020, down 3.7 percent compared with the 77.32MT received in 2019.

LNG imports by the world's largest buyer of the fuel have continued to drop in recent years. The 2019 total of 77.32MT was 6.7 percent lower than the 82.85MT logged in 2018.

The January and February 2021 shipments of 8.06MT were still short of the most recent record set in January 2017 of 8.30MT.

Japan's shipments in February 2021 cost 408.22 billion yen (\$3.73Bln), a surge of 15.9 percent on the 352.14Bln (\$3.23Bln) spent in February 2020 when volumes were also less.

Japan was expected to have steady imports in the early

months of 2021 as it re-builds its stocks used in the colder weather of winter.

LNG competes mainly with thermal coal for power generation in Japan, while the nation's nuclear power generation was still at a very low level.

Japan's thermal coal imports in February 2021 came to 9.82MT, an increase of 7.3 percent on the shipments received in January 2020.

Nuclear power usage in Japan is still much reduced to less than a handful on line compared with the 50 units operating in 2011.

Asia's February LNG cargo deliveries to Japan from nations such as Malaysia and Indonesia, Papua New Guinea and Brunei amounted to 1.95MT, an increase of 17.6 per-

cent versus February 2020. Middle East shipments from countries like Qatar, the United Arab Emirates and Oman dropped in February by 8.7 percent to 1.20MT.

Shipments from Russia last month, mostly from the Sakhalin Island plant in the Far East, rose 20.2 percent to 718,000 tonnes.

However, US cargo deliveries to Japan surpassed those of Russia again and amounted to 948,000 tonnes, down on January's total of 953,000 tonnes, though double the volumes logged in February 2020.

During 2020, Japan was receiving more US cargoes as additional capacity came on stream on the Gulf Coast and shipments grew by 27.8 percent from 2019 to 4.72MT.

Australians double Mongolia CSG count

Elixir Energy, the Australian exploration and production company with plans for a small-scale liquefaction plant using coal-seam gas to provide clean fuel for trucks in Mongolia, is making progress in its South Gobi Desert operations with prospective resources having almost doubled to 14.6 trillion cubic feet.

"The appraisal program to date is a very small area of a 30,000 square kilometres production sharing contract," said the Adelaide-based company in its latest presentation just published.

"Based on only 240km of 2D seismic and field work, there are 6-plus new potential basins identified and which will be drilled in 2021," it explained.

"More sub-basins should be discovered with more exploration work and there is enormous scope for significant gas reserves," Elixir stated.

However, only Elixir's Nomgon sub-basin has CSG discoveries to date.

"When you add up multiple sub-basins and you have a resource size of interest to oil and gas majors and National Oil Companies," said Elixir.

"Elixir managed to pursue a successful exploration and appraisal program in 2020 despite the emergence of Covid-19," added the company.

In 2021, Elixir said it was planning to undertake a pilot production test on the Nomgon sub-basin coal seams.

"This will be the first test of its kind in Mongolia. The test will begin in the second half of 2021 and is likely to have multiple stages," explained the company listed on the Australian Securities Exchange.

Excelerate and ExxonMobil combine for joint study on Albanian LNG

LNG News Editor

Excelerate Energy, the experienced US floating liquefied natural gas import project company, has signed an accord with the European Balkans country of Albania to study the potential of LNG imports and backed by ExxonMobil Corp.

The memorandum of understanding with Excelerate and ExxonMobil will study the feasibility of an LNG import terminal at the Port of Vlora in southern Albania.

Scope

Under the accord, Excelerate will conduct a study to explore the potential of an integrated LNG-for-power solution for the Albanians.

This will include developing an LNG import terminal, converting or expanding the existing Vlora thermal power plant and establishing small-scale LNG distribution in Albania and for the surrounding Balkans region.

The pre-feasibility report is expected to be delivered in the third quarter of 2021, while the tar-



Albanian Minister Balluku (centre) signs with US executives

geted start-up for the LNG terminal could be as early as 2023.

"As Albania looks to improve energy security and resiliency, we are confident that an LNG solution would provide reliability to the country's power grid while complementing intermittent renewables and alternative resources," stated Steven Kobos, President and Chief Executive of Excelerate.

"We are pleased to work with our partners in developing a reliable and affordable solution for Albania's energy resilience," stated Kobos.

Albania is traversed by eight major river systems and has previously relied on hydropower plants, which can become unreliable dur-

ing times of drought in supplying electricity.

Excelerate has delivered reliable and clean energy to markets across the world with 13 FSRU LNG import projects.

"Supply diversification and the enhancement of supply security are crucial to Albania and to our Balkan neighbours as well," said Albanian Minister of Infrastructure and Energy Belinda Balluku.

"We are confident that LNG can be the key to achieving these strategic objectives and to finally provide a solution to the complex Vlora thermal power plant project by choosing the best partners," she added.

Vopak studies south Australian import facility and S. African one

Royal Vopak, the Dutch storage company and shareholder in the Dutch liquefied natural gas import terminal in Rotterdam, said it was studying an LNG import facility in the south Australian state of Victoria after previously looking at a similar project in South Africa.

Vopak is an experienced LNG terminal operator and has a 50 percent stake in the Dutch Gate LNG facility in Rotterdam with 540,000 cubic metres capacity of storage.

It additionally has a 60 percent shareholding in the Mexican LNG terminal at Altamira in the Gulf of Mexico with 300,000 of tank capacity.

The company said that it was

currently studying the feasibility of developing an LNG import terminal in Port Phillip Bay at Avalon in Victoria.

Vopak's proposal for a facility using a floating storage and regasification unit is one of about half a dozen proposed for the southeast of Australia where natural gas shortages are forecast.

Victoria is the largest gas consuming state in that region of Australia and if the Vopak project moved forward the Dutch company said it would expect first gas from around 2024.

Vopak said it planned to own 100 percent of the Victoria terminal, though it would evaluate partnering options if they arose.

"It is anticipated a facility would likely operate as a peak shaver for winter demand in the near term," said Vopak.

Vopak in December 2020 joined US major ExxonMobil in saying it was studying possibilities for South Africa to become an LNG importer to boost gas-fired power and clean energy availability.

Vopak and ExxonMobil signed a memorandum of understanding on studying the development of a South African regasification facility.

So far no third-parties are involved in the process to make South African an LNG importing nation in the next couple of years.

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NEWS NUDGES

Gazprom EPC change

Gazprom has decided to terminate the engineering, procurement and construction contract awarded to Nipigaz for the construction of a gas processing complex near Ust-Luga on the Baltic coast, eventually including an LNG plant. "The purpose of the decision is to optimize the project costs," said Gazprom. "The replacement of the contractor will not have any influence on the project implementation schedule. A new contractor for these works will be appointed in the near future," added Gazprom.

ENN ship for fuel

The first Chinese seagoing LNG bunkering vessel, which has 8,500 cubic metre of capacity, will be delivered into service after mid-2021 to ENN Energy Group. ENN, the operator of the Zhoushan LNG import terminal in China's eastern Zhejiang province, said the vessel with a C-type storage tank was nearing completion at the Dalian Shipbuilding Industry Corp. shipyard.

Shell sale finalized

Royal Dutch Shell has completed the sale of a 26.25 per cent stake in the Queensland Curtis LNG export plant near Gladstone QGC for US\$2.5 billion. The buyer was Global Infrastructure Partners Australia. Shell said the sale was consistent with the Anglo-Dutch company's strategy of selling non-core assets to simplify the portfolio. "The sale will contribute to Shell's expected divestment proceeds, without impact on people or the operations of the QCLNG venture," said Shell, which acquired the LNG project after taking over BG Group.

Nordic LNG leader Gasum posts loss and drop in income but expands infrastructure and bunkering reach

LNG News Editor

Gasum, the Finnish state-owned LNG distribution company and regasification and liquefaction infrastructure owner in the Nordic region, posted an annual net loss and lower revenues while expanding its operations.

Gasum posted €8.9 million (\$10.6M) of net losses in 2020 compared with a net profit of €25.2M in the previous year.

Group income totalled €772.0 million, down from the €988.7M recorded in 2019.

Operations

Gasum said it registered a group adjusted operating profit of €33.8M versus €28.9M in the previous year.

Gasum owns LNG import terminals, a small-scale liquefaction plant and an expanding chain of LNG fuel stations for vehicles in the Nordic region as well as a maritime bunkering network.

It has recently expanded its LNG bunkering operations to France and Singapore after already entering the Antwerp, Amsterdam and Rotterdam region fuel market in Europe.

"Despite the exceptional circumstances, we succeeded in advancing our strategy as planned, which required hard work in an increasingly competitive market," said Gasum Chief Executive Johanna Lamminen.

"The importance of gas as an energy source over the longer term will increase further in industry and maritime transport in particular, as the Nordic countries are taking steps towards carbon-neutral societies," she added.

"Regardless of the uncertainties caused by the Covid-19 pandemic, we were able to ensure business continuity and progress in our projects," stated the CEO.

Gasum said that maritime transport demand and interest in gas-powered heavy-duty vehicles continued to grow in 2020.



Gasum CEO Johanna Lamminen optimistic for business

"As part of our strategy execution, we closed the acquisition of Linde AG's LNG and Biogas business and Nauticor's Marine Bunkering business," noted the CEO.

"The transaction expanded our supply of gas solutions in the Nordic nations, particularly in maritime transport and heavy-duty road transport while also expanding our gas filling station network," she added.

Lamminen said the number of gas-powered HDVs increased by more than 400 new vehicles in the Nordic region during 2020.

"Companies upgrading their fleets included Posti Freight Services in Finland with its 10 new biogas-fueled trucks and Bring Akeri in Sweden with its six new biogas trucks," she said.

Gasum added that the highlights have included providing shipping customers with a more extensive geographical area by entering into partnership with Pavilion Energy of Singapore.

"We also started regular deliveries of a fuel blend containing renewable liquefied biogas to our maritime transport customer Preem in Sweden," the company added.

Gasum also entered into a portfolio management cooperation agreement with the Finnish energy company Keravan Energia and expanded its role in the Nordic power market by becoming a member of the Nordic power ex-

change of Nasdaq OMX. "The importance of gas as an energy source over the longer term will increase further as the Nordic countries are moving towards carbon-neutral energy production," said Gasum in its market outlook contained in the earnings report.

"The use of gas is projected to grow strongly in the years ahead, particularly in industry and transport. Gasum has prepared for the growth in demand by investing purposefully in the development of the Nordic gas infrastructure for several years already," stated the company.

Its terminals include Sweden's Nynashamn small-scale facility with 20,000 cubic metres capacity of storage and purchased in April 2020 by Gasum from Germany's Linde.

The Finnish company also has a small-scale liquefaction plant in Risavika, near Stavanger in Norway, in addition to owning and operating other small regasification and import terminals in Ora and Alesund in Norway and Lysekil in Sweden.

It also partly owns the Pori LNG import terminal in Finland and has a stake in the Finnish Tornio Magna regasification facility.

The Tornio terminal in Northern Finland is the largest in the Nordic region.

It is located on the Swedish border which allows Gasum to serve customers in Finland, Sweden and Norway.

Senegal to make LNG debut as importer with Turkish-Japanese FSRU before FLNG project

LNG News Editor

Karmol, the Turkish-Japanese joint venture, said its first floating storage regasification unit (FSRU) has been delivered by Sembcorp Marine in Singapore and will begin sea trials ahead of deployment in the West African state of Senegal in June.

The FSRU, called “Karmol LNGT Powership Africa” will enable Karmol, a joint venture between Turkey’s Karpowership and shipping company Mitsui OSK Lines, to offer LNG-powered electricity to Senegal for the first time using its floating Powership, “Karadeniz Powership Aysegul Sultan”.

Established

In Senegal, Karpowership has been operating a 235MW capacity vessel with fuel oil and providing around 15 percent of the country’s electricity supply since August 2019.

The first FSRU, operated by Karmol, will soon sail to the West African country and the Powership



FSRU ‘Karmol LNGT Powership Africa’ to be deployed

will switch to operating with LNG before the end of June.

This LNG-for-power project is advancing as Senegal and neighbour Mauritania pursue a floating LNG production venture with UK major BP and Kosmos Energy of Dallas, Texas.

“Karmol’s unique technology means a combination of Powerships and the FSRU will bring LNG for power to countries with no domestic gas supply,” said the

Karmol statement. Under the same joint venture, another FSRU is already under construction which is planned for deployment to Mozambique, another future LNG producer.

“This is a big moment for West Africa and the wider continent, and an exciting time for Karmol,” said Karmol board member Gokhan Kocak.

“We have a bold ambition to offer LNG-for-Power across the

world and especially within Africa,” added Kocak.

“Usage of FSRUs mean we can unlock the benefits of clean and affordable electricity for millions of people, even where countries have no domestic gas production or infrastructure,” he stated.

“I am looking forward to the ship completing its sea trials and beginning its voyage to Senegal,” declared Kocak.

Karpowership established a joint venture with MOL in 2019 to establish the LNG-for-power solutions under the brand name of Karmol.

The Senegal FSRU and another vessel each have a capacity of 125,000 cubic metres. Sembcorp Marine did all the construction and conversion work.

Following gas trials, the FSRU is expected to depart Singapore early in April and is expected to arrive in Senegal in mid-May, with operations planned to begin in June.

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Spanish port of Cartagena bunkers ship from China

Cartagena, the LNG import terminal in southeast Spain, has hosted the first LNG bunkering operation in the Mediterranean with emissions offsets.

Spanish energy company Repsol organised the fuelling of the LNG-powered vessel, the Swedish-flagged “Fure Vinga” with 420 cubic metres of LNG.

The Repsol operation was in cooperation with the Port Authority of Cartagena and Enagás, operator of the Cartagena import terminal.

“The uniqueness of the operation is that this is the first time that Repsol, as a supplier of LNG, has guaranteed the compensation of the total CO2 emissions associated with the consumption of this LNG,” said the company.

The re-fuelled ship, the “Fure Vinga”, is owned by the shipping company Furetank Rederi, headquartered in Donsö in Sweden.

This chemical tanker had arrived in Cartagena from China and was scheduled to continue to its ultimate destination of Rotterdam in the Netherlands.

“The operation, which lasted approximately four hours, was carried out using the Enagás facilities in the port of Cartagena,” said Repsol.

Repsol noted that its bunkering was the first supply of this kind by a multi-energy company with emissions compensation through the purchase of CO2 credits (VERs) in the Voluntary Carbon Market.

Repsol is also adding direct supply of LNG from the terminal in Cartagena to its network in Spain.

Høglund Gas Solutions expands retrofit portfolio for Halliburton

LNG News Editor

Norwegian company Høglund Gas Solutions has signed a contract to provide a turnkey retrofit with LNG fuel capability for a Base Marine Norway-owned ship, the bulk and general carrier “Hannah Kristina”, which has US oil services company Halliburton as the end-charterer.

“The project aims to improve the vessel’s environmental footprint by converting the marine diesel oil-fuelled vessel into dual-fuel by supplying an LNG Fuel Gas Supply System (FGSS) alongside an upgrade with shore power connection,” said Høglund.

Stakeholders

The project, led by Høglund, will require extensive collaboration between numerous stakeholders, including naval architects, engineering teams, a retrofit shipyard, various suppliers, the class society flag state and the vessel owners and operators.

“Høglund will therefore collaborate with long-time partners HB Hunte Engineering GmbH and Fiskerstrand Verft AS for the naval



The chartered bulk and general carrier ‘Hannah Kristina’

architecture and shipyard elements of the project, respectively. The entire project will be classed by DNV,” explained the Norwegian company.

The scope under the contract consists of a 250 cubic metres capacity FGSS with a dedicated Gas Control and Safety System to serve the already installed dual-fuel system with natural gas.

“In order to implement the appropriate safety measures following the requirements of the IGF-Code and improve the safety credentials of the ‘Hannah Kristina’, Høglund will be combining its extensive knowledge in gas, power and automation solutions with HB Hunte’s outstanding expertise in naval engineering to per-

form further modifications on the vessel,” the company explained.

The delivery of the retrofitted vessel is expected to take place in March 2022.

“The technological and environmental transformation of shipping over the coming years is one of the biggest challenges facing our industry,” said Philipp Ulrich, Senior Project Manager at Høglund.

Jean-Marc Lopez, Vice President of Halliburton in Norway, explained the reasoning for the move.

“By utilizing ‘Hannah Kristina’, Halliburton has moved huge amounts of goods from road to sea, reducing the emission of CO2 and NOx,” he said.

Russian fleet owner Sovcomflot expands LNG time-charter base as well as firm revenues

Sovcomflot, the Russian shipping line with 31 gas carriers in operation or on order and an overall fleet of 145 vessels, posted a more than 18 percent jump in annual net profits as revenues also increased.

Sovcomflot (SCF) reported a net profits rise to \$266.9 million in 2020 compared with \$225.4M in the previous year.

Time charter equivalent (TCE) revenues for the year rose by 6.7 percent to \$1.35 billion from \$1.26Bln in 2019.

SCF is involved in servicing large oil and gas projects in Russia and around the world, including the Sakhalin and Yamal LNG export plants in Russia and Tangguh LNG

in Indonesia. The group said it continued to expand its long-term industrial business portfolio, with a special focus on operations in harsh environments ice conditions. More than 80 of the group’s ships are ice-class.

“SCF’s business portfolio, comprising of gas transportation, LNG as well as liquefied petroleum gas (LPG) vessels, and harsh environment offshore services (shuttle tankers and ice-breaking supply vessels) accounted for a half of the TCE revenue in 2020 and continues to provide a long-term fixed income revenue stream,” explained the company.

Annual net revenues from ves-

sel trading jumped by 8.2 percent to \$983.7M from \$909.2M in the previous year.

During 2020, SCF has either directly or through its Smart LNG joint venture with Russian natural gas and LNG plant operator and developer Novatek, time-chartered 17 ice-breaking carriers to the Arctic LNG II project.

In February and September 2020, SCF took delivery of two next-generation 174,000-cbm Atlanticmax LNG carriers, “SCF La Perouse” and “SCF Barents”, both chartered to energy majors, Total and Shell, under long-term contracts.



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Columbia Gulf Transmission gets permit to supply feed gas for Plaquemines LNG exports

LNG News Editor

Columbia Gulf Transmission, the natural gas pipeline along the US Gulf Coast, has received authorisation from the Federal Energy Regulatory Commission that will enable the supply of feed gas to the Venture Global Plaquemines LNG export plant being built on the west bank of the Mississippi River.

The FERC permit is for Columbia Gulf Transmission to construct and operate two new compressor stations, a new meter station and other facilities to provide 725 million standard cubic feet per day of feed gas for the Plaquemines liquefaction plant, located south of New Orleans.

Unit

Columbia Gulf Transmission is owned by Canadian pipeline and infrastructure company TC Energy, whose Keystone XL oil pipeline was the first energy project cancelled by presidential decree when Joe Biden took office in January 2021 as President.



A graphic of Plaquemines LNG plant on the Mississippi

The FERC said that its assessment was positive for Columbia Gulf Transmission's East Lateral XPress Project and it did not see any adverse environmental effects.

"The FERC staff concludes that approval of the proposed project, with appropriate mitigating measures, would not constitute a major federal action significantly affecting the quality of the human environment," said the FERC ruling.

The East Lateral XPress Project is a small part of Columbia Gulf Transmission's 3,400-mile pipeline

that delivers natural gas to customers in Louisiana, Mississippi, Kentucky and Tennessee.

Its transportation services also move gas from the Gulf of Mexico to other pipelines in southern Louisiana.

The proposed East Lateral XPress Project includes 8.1 miles of 30-inch-diameter pipeline lateral within Balataria Bay at Plaquemines Parish in Louisiana, a 3,470-horsepower compressor station at an abandoned Columbia Gulf compressor station site in St.

Mary Parish and another 23,470-HP compressor station adjacent to an existing tie-in facility in Lafourche Parish.

All of these different small parts of the East Lateral Express project will open the way for firm feed-gas supplies for the Plaquemines export plant.

In addition to the Plaquemines plant being developed at river mile-marker 55 on the Mississippi, about 30 miles south of New Orleans, Venture Global is also building the Calcasieu Pass LNG plant in Louisiana, where half of the 18 mid-scale liquefaction Trains have already been completed.

The area of Calcasieu Pass already plays host to the existing Cameron LNG plant, operated by Sempra Energy.

Both Calcasieu Pass and Plaquemines are being constructed by Arlington, Virginia-based Venture Global with liquefaction and export capacity of 10 million tonnes per annum and with the same number of 18 modular Trains.

Algeria warns that African countries risk being shunned for oil and gas funds by outside world

Algerian Minister of Energy and Mines, Mohamed Arkab, said at a meeting of 15 African energy-producing nations, six of them LNG exporters, that they should unite to find solutions to multiple challenges facing the hydrocarbon sector, in particular the energy transition and the lack of funding for fossil fuel projects.

Algeria has two LNG plants at Arzew and Skidra, while other LNG countries at the virtual-conference included Nigeria, Egypt, Angola, Cameroon and Equatorial Guinea.

Arkab made the opening address to the extraordinary meeting of the Council of Ministers of the African Organization of Petroleum Producing Countries (APPO) at a

time when the continent's oil and gas companies are under extreme pressure.

The Algerian Minister noted that African oil and gas-producing countries are seeing an accelerating energy transition, while international funding was moving towards investments in fields other than hydrocarbons.

"In addition, the laws and directives adopted in many countries impose restrictions and financial penalties on the use of fossil fuels," said Arkab.

"All these changes and new trends are occurring at a time when our countries are unfortunately still very dependent on income from fossil fuels for the

financing of economic and social development," stated the Minister.

Referring to the impact of the Covid-19 pandemic which he said had caused a "shock" in African economies and energy systems, Arkab said worse was to come.

"Some of the world's major multilateral financial institutions like the World Bank and private financial institutions have publicly announced their intention to end lending for fossil fuel projects," he stated.

Arkab recalled that the Paris agreement on climate change, signed in 2015, aimed to end the use of hydrocarbons by 2050, hence the need for member countries to "find a balance between

the evolution of the world and the particular challenges" facing the African continent.

"African countries risk having fixed assets and not being able to sell their resources to the outside world, nor to use them fully for their own needs," stated the Algerian Minister.

To this end, Arkab urged the members to make a joint and united effort to consolidate cooperation in the field of hydrocarbons, improve access to energy as well as to try and diversify their economies.

This was the 40th meeting of the Council of Ministers of APPO and Algeria is the chairman of the body for 2021.