



JP MORGAN TIED TO \$800M RESALES SNAPPED UP BY VENTURE GLOBAL

US producer moves in on early-delivering vessels as it holds on to its export volumes. Interests associated with investment bank JP Morgan are being linked to three high-priced LNG carrier newbuilding resales that are said to have been snapped up by US producer Venture Global LNG for over \$800m in total. Brokers in the sector said JP Morgan has sold three of its on-order LNG carriers for around \$270m each. The vessels are understood to be due for delivery dates before the end of 2026. TradeWinds has contacted both JP Morgan Asset Management and Venture Global LNG for confirmation and further details but as yet, has received no response. If confirmed, it would set a new record price for an LNG carrier newbuilding resale. JP Morgan originally launched into the LNG carrier sector, apparently on speculation, but later tied up tonnage to energy majors including BP and Shell before being selected to sign up to 12 of the LNG newbuilding berths QatarEnergy had declared under Phase 1 of a huge shipbuilding project. The company, which has previously declined to disclose its fleet numbers to TradeWinds, controls a large raft of at least 28 LNG carriers of which 21 are believed to be under-construction vessels. One database lists 18 on-order vessels at Samsung Heavy Industries and three newbuildings at HD Hyundai Heavy Industries all for the account of JP Morgan's Bermuda affiliate Global Meridian Holdings. Of these 21, seven are scheduled for handover this year, eight in

2025 and six in 2026. The Global Meridian LNG newbuildings ordered in 2021 for handover dates in 2024 and 2025 are listed on Clarksons' Shipping Intelligence Network as having been contracted at prices in the region of \$206.5m to just over \$207m. This represents a huge discount on the last concluded LNG carrier newbuildings, which were reported to have been priced around the \$267m to \$270m mark and would represent a significant profit if sold. Named buyer of the LNG resales, Venture Global, is building a chain of LNG production facilities on the US Gulf coast. The company has ordered five 200,000-cbm LNG newbuildings at Hanwha Ocean to ship its cargoes. These vessels — the first three priced at \$237m and the second pair at \$250m — are scheduled for handover in late 2025 and 2026. Venture Global initially made its name by offering a new take on liquefaction construction by offering a fast-to-market modular approach to building. But more recently it has been at the centre of a publicly played out row with its big-name LNG offtakers like BP, Shell and Repsol, after the company refused to start supply under their sales and purchase agreements until its first plant completes commissioning and achieves commercial operations. Venture Global's 12-million-tonne-per-annum Calcasieu Pass LNG facility started exports at the end of February 2022 and has already shipped over 200 cargoes. The LNG newbuildings that Venture Global contracted were originally required for its second project, the 20-mtpa Plaquemines LNG, from which it is selling some of the LNG on a free-on-board basis. Venture Global is also developing two more projects which, if completed, would give the company a total of 70 mtpa of LNG in the US — the 20-mtpa Delta LNG and a fourth project dubbed CP2 LNG. source : www.tradewindsnews.com

YPF EYES MOVE FOR PETRONAS FLNG UNIT TO ARGENTINA

State-run entity opts to move ahead on large-scale LNG project. Argentinian energy company YPF has revived plans to develop the country's offshore gas reserves and put an existing floating LNG production unit in place by 2027. Those who have been following efforts to monetise the Vaca Muerta reserves said YPF is planning to use Malaysian state energy giant Petronas' 1.2-million-tonnes-per-annum PFLNG Satu (built 2016) unit. The floater is currently deployed off Sabah state in east Malaysia. A relocation to Argentina would be a long voyage from its current location but it would not be the first time the unit has been shifted. PFLNG Satu made history as the world's first FLNG unit when it started production in 2017. Two years later, Petronas — which operates two existing FLNG units and is building a third — scored another first when it was relocated to a new nearshore location in 200 metres of water to develop a marginal gasfield. In 2022, YPF and Petronas signed up to work together on LNG in Argentina. In a results presentation, YPF chairman and chief executive Horacio Marin said the plan is to sanction the development of a large-scale LNG project by mid-2025. YPF detailed that it plans to use an existing FLNG unit from 2027 to ensure early production of between 1 and 2 mtpa of LNG but did not name the floater it plans to deploy. The company said that from 2029 to 2030 it would introduce two new FLNG facilities, which would enable it to boost production by an additional 8 to 9 mtpa. Onshore modules would be added post-2030, which would push up LNG production by a further 15 to 20 mtpa. The energy company, which is 51% state-owned, said its target is to export between 25 and 30 mtpa of LNG

from 2032 onwards, which would secure around \$15bn per annum of revenues. “YPF aims to own about 25% to 30% of the total LNG capacity,” the company said. “Making progress on the first Argentine LNG project” is detailed as the fourth pillar of YPF’s business strategy. Argentina, which elected far-right Javier Milei as its new president in December, has long been trying to monetise its offshore gas reserves. source : www.tradewindsnews.com

GLENFARNE’S TEXAS LNG SAYS MOVES TO EXECUTION PHASE OF PROJECT FINANCING

Glenfarne Group’s Texas LNG, the developer of the planned 4 mtpa LNG export terminal in the port of Brownsville, has received sufficient expressions of interest from project finance banks to move to the execution phase of project financing. “These lenders have been key supporters of Glenfarne, having led over \$4 billion of financing to Glenfarne’s businesses over the last 10 years, supporting the acquisition and/or construction of various energy transition focused assets,” the firm said in a statement. Furthermore, these banks are active in LNG, having participated in about \$44 billion of project finance debt to the U.S. LNG sector alone over the last 24 months, Glenfarne said. The firm has also appointed Latham & Watkins as borrower’s counsel and Milbank as lenders’ counsel for the issuance. “Texas LNG’s financing consortium will be comprised of the world’s leading institutions that recognize the attributes of the project and Glenfarne’s excellent history of building energy transition infrastructure,” said Brendan Duval, CEO and founder of Glenfarne. This move follows Texas LNG’s recent announcement that it secured the final permits for the project and also the signing of a heads of agreement with US natural gas producer EQT for natural gas liquefaction services for 0.5 mtpa of LNG. Texas LNG also previously selected Swiss engineering group ABB and US energy services firm Baker Hughes to supply equipment for its LNG project. This represents more than half a billion dollars’ worth of equipment selections for Texas LNG to date, according to the firm. The first LNG exports from Texas LNG are expected to be shipped in 2028. source : www.lngprime.com

DET SAYS FSRU TO ARRIVE AT STADE LNG JETTY ON FRIDAY

State-owned DET expects the 174,000-cbm FSRU Energos Force to arrive at the AVG jetty in Germany’s Stade on Friday. The FSRU is on its way from Rotterdam where minor work was carried out to convert the ship from cargo operation to FSRU operation. The German LNG terminal operator said in a statement on Thursday the vessel is expected to arrive at the AVG jetty in the industrial port of Stade-Bützfleth at around 7.30am local time on March 15. The almost 300 meters long ship, operated by DET, will undergo several weeks of test operations before being able to feed up to 5 bcm of gas per year into the German gas network, thereby making a “significant” contribution to security of supply and gas price stability in Germany and Europe, it said. A spokesman for DET told LNG Prime that the arrival date of the commissioning cargo for the FSRU-based terminal has not yet been determined. This is the third of DET’s four FSRU-based LNG terminals following the launch of the Brunsbüttel and Wilhelmshaven 1 terminals. DET also expects commissioning to start at the its second terminal in

Wilhelmshaven at the end of the second quarter of 2024. Peter Röttgen, managing director of DET, said this third DET liquefied natural gas import is also “an important step for many companies that, despite technical efforts, are still dependent on large quantities of natural gas for the time being.” “After all, industrial and commercial companies need planning security. LNG provides the needed economic stability today and is a basis for the transition to climate-neutral production. This will also affect many thousands of jobs today and in the future,” he said.

Energos Force

In December last year, the FSRU left Germany’s Bremerhaven and since then it has been serving as an LNG carrier. The 2021-built FSRU, previously known as Transgas Force, was recently purchased by Apollo’s Energos Infrastructure from Greece’s Dynagas. Energos Infrastructure will be responsible for the regasification at the FSRU, while coordination of LNG carrier berthing, gas flows and reporting will be managed by Lithuania’s KN Energies on behalf of DET, the company said. Harbor structures on the water side were built by port operator Niedersachsen Ports. Also, DET had commissioned Hanseatic Energy Hub (HEH), which is working on the onshore Stade LNG terminal, to build the superstructure. HEH will continue to work on behalf of DET at the FSRU, taking over services for technical operation and maintenance in cooperation with DOW, it said. During winter, the FSRU can regasify a maximum of 500 million standard cubic feet of gas per day (MMSCFD) in a closed cycle with steam boilers, according to DET. DET said that during summer, regasification capacity can be raised up to 750 MMSCFD in an open cycle utilizing seawater. Energos Force’s expected annual sendout capacity of up to five bcm of gas represents the so-called DTRS value (declared total reference sendout). This refers to the maximum technically possible system send-out under ideal conditions, meaning that neither extreme weather conditions nor technical restrictions will reduce the amount of gas fed into the German gas grid, DET noted. Nevertheless, lower sendouts due to the actual size of the delivered cargoes have to be taken into account, it said. In December, DET allocated 11 regasification slots at its upcoming Stade terminal and it just postponed capacity allocations planned for April. source : www.lngprime.com

SNAM’S PIOMBINO FSRU RECEIVED 19 LNG CARGOES

Snam’s FSRU-based LNG import terminal in the Italian port of Piombino has received 19 liquefied natural gas cargoes since its launch last year, while Snam continues to progress work on the facility in Ravenna. The 170,000-cbm Golar Tundra in Piombino received its first commercial shipment from Eni in July last year. Eni booked regasification capacity at the FSRU-based facility as part of its strategy to diversify LNG supplies to Italy through its internationally produced equity gas. According to Snam the capacity of this FSRU-based terminal is fully booked. “The FSRU in Piombino has so far received 19 ships for a total of 1.7 bcm,” CEO Stefano Venier said during Snam’s 2023 earnings call on Thursday. Besides this unit, Snam completed in December last year the purchase of BW LNG’s 2015-built FSRU BW Singapore for about \$400 million. The FSRU will be located off the coast of Ravenna, around 8 kilometers away from the Punta Marina area. Snam said that onshore and offshore

works have started and expects this unit to start operations in 2025. Venier said during the call that Snam expects to complete these works by the end of this year. Snam also plans to launch an auction for regasification capacity in “coming weeks”.

Regas volumes up

According to Snam, volumes regasified in 2023 amounted to 3.69 billion cubic meters, a rise of 64.7 percent compared to 2022, while 62 tankers were unloaded, compared to 59 tankers in 2022. “The increase in the volume of LNG regasified and a consequent increase in the number of tanker loads unloaded was due to the impact of the war between Russia and Ukraine on the gas market, which drove an increase in the demand for LNG to meet domestic demand,” the firm said. Snam said the higher volumes also reflect the effects of the entry into operation of the Piombino FSRU, which in the second half of 2023 regasified a total of 1.12 bcm. Source : www.lngprime.com

ADNOC AWARDS EARLY EPC DEAL FOR RUWAIS LNG

ADNOC has issued a Limited Notice to Proceed (LNTP) for early engineering, procurement and construction (EPC) activities to a joint venture led by Technip Energies and including JGC Corp and National Petroleum Construction Co PJSC for its LNG project in Al Ruwais Industrial City, Abu Dhabi. “With the final investment decision expected this year, the Ruwais LNG project is set to be the first LNG export facility in the Middle East and North Africa region to run on clean power,” the company said. Once completed, the project will consist of two 4.8M tonnes per annum (mta) LNG liquefaction trains with a total capacity of 9.6 mta, and is set to more than double ADNOC’s LNG production capacity, from 6 mta to around 15 mta. The site, located in Abu Dhabi’s Al Dhafrah region, will serve as an operations hub for ADNOC and its companies. The 9.6-mta Al Ruwais plant is part of ADNOC’s LNG growth project, as it intends to more than double its LNG production capacity to meet increased global demand for natural gas. The plant, which is designed with electric-powered processing facilities, will run on renewable and nuclear grid power with the intent of reducing carbon intensity. The Emirate of Fujairah was mooted as a potential location, but ADNOC settled on Ruwais, saying the selected location offers “significant synergies and existing infrastructure that will be leveraged to deliver project efficiencies,” unlocking additional value for ADNOC, its partners and the UAE. The state-owned firm already operates a 6-mta LNG facility on Das Island, off the coast of the capital Abu Dhabi. source : www.rivieramm.com

ALGERIA’S SONATRACH SAYS NEW SKIKDA JETTY GETS FIRST LARGE LNG CARRIER

Algeria’s Sonatrach has received the first large liquefied natural gas (LNG) carrier at the new jetty in Skikda. According to a statement by Sonatrach, the 2017-built 171,800-cbm, Ougarta, owned by Sonatrach’s unit Hyproc Shipping, docked at the new “M3” jetty in Skikda on March 9. The firm conducted high-level tests to ensure that the Skikda port is ready to receive ships efficiently and safely after the expansion of the port. This achievement reflects Sonatrach’s keenness to increase the loading

and unloading capacities at the port of Skikda, it said. Back in 2019, Sonatrach awarded a contract to China Harbor Engineering Company (CHEC) to build the LNG jetty to optimize the Skikda LNG complex's production and allow the loading of large-capacity LNG carriers with a capacity of up to 220,000 cbm. Besides the new jetty, Sonatrach awarded a contract in February 2022 to units of China's state-controlled giant Sinopec to build one storage tank at its 4.5 mtpa Skikda LNG export plant. Under this deal, the Chinese group built a new LNG storage tank with a nominal capacity of 150,000 cbm at the Skikda GL1K liquefaction complex. Prior to this, the contractor dismantled two existing tanks. The deal also included the supply and installation of equipment for the connection of the storage tank to the LNG loading system of the new Skikda jetty. Algeria became the world's first LNG producer in 1964 when Sonatrach's Arzew facility came online. The Arzew facility has in total three trains and they have a total capacity of about 20.8 mtpa, but the plant has been operating below its capacity. Last year, Sonatrach extended its LNG supply deal with France's TotalEnergies for 2 mtpa. In addition, the company also extended its LNG supply deal with Turkey's Botas for about 3.2 mtpa. source : www.lngprime.com

ITALY'S PIOMBINO FSRU SET TO RECEIVE FIRST CARGO FROM ENI'S CONGO LNG PROJECT

Italy's Eni is expected to deliver soon the first liquefied natural gas cargo produced at its Tango floating LNG facility moored in Congolese waters to Italy's Piombino FSRU-based terminal, according to shipping data. Eni said on February 27 that it was loading the first LNG cargo in the Republic of Congo, also known as Congo-Brazzaville, and that it will deliver the shipment to Snam's Piombino FSRU-based terminal. The 2010-built 155,000-cbm LNG carrier, GasLog Savannah, left Pointe Noire early March and was on Wednesday located in the Alboran Sea off Spain and heading towards Italy, its AIS data provided by VesselsValue shows. However, the LNG carrier changed course and was anchored offshore Gibraltar on Thursday. The data shows that the vessel is expected in Piombino on April 6. GasLog Savannah appears to be partially loaded. LNG Prime contacted Eni to comment on the arrival of the LNG carrier in Piombino but we did not receive a reply by the time this article was published.

Tango FLNG

Eni introduced the first gas in December 2023 into its Tango FLNG facility. Prior to that, the unit arrived in Congo from Dubai. The Italian firm purchased the 144 meters long Tango FLNG from Belgium's Exmar and it also chartered the 2002-built 138,000-cbm steam turbine LNG carrier, Excalibur, to serve as an FSU for the project. Moreover, the floating LNG producer, delivered in 2017 by China's Wison, has a liquefaction capacity of about 1 billion cubic meters per year of gas, or 0.6 mtpa, and a storage capacity of 16,100 cbm. Eni said the FLNG project, situated within the Marine XII permit, will achieve a plateau gas liquefaction capacity of about 4.5 billion cubic meters per annum and will mark zero flaring from operated activities in country.

Second unit

Also, a second FLNG vessel with a capacity of about 3.5 bcm per year of gas, or 2.4 mtpa, is under construction in China and is expected to begin production in 2025. Wison Offshore & Marine won a contract from Eni in December 2022 to build the 380 meters long FLNG. The unit will be able to store over 180,000 cubic meters of LNG. The volumes produced from the FLNG project will be marketed by Eni, strengthening and expanding the company's LNG portfolio. Source : www.lngprime.com

KOGAS LOGS LOWER SALES IN FEBRUARY

South Korean LNG importer Kogas reported lower gas sales in February compared to the same month in the year before due to lower demand for power generation. State-owned Kogas sold 3.50 million mt last month, a drop of 11.1 percent compared to 3.93 million mt in February 2023, according to a stock exchange filing. February sales decreased by 20.8 percent compared to the previous month's 4.42 million mt, Kogas said. Purchases by power firms decreased by 27 percent year-on-year to 1.28 million mt in February. These purchases dropped by 20.8 percent compared to the previous month. Moreover, Kogas said its city gas sales increased by 1.6 percent year-on-year to 2.22 million mt while they dropped by 20.8 percent compared to the month before. Official data for South Korean LNG imports in February is not yet available. South Korean LNG imports in January rose to 4.91 million mt from 4.78 million mt in January 2023, customs data previously showed. South Korea paid \$3.47 billion for these LNG imports. This compares to \$6.2 billion last year, the data showed. Kogas operates 77 LNG storage tanks at five LNG import terminals in South Korea. The large terminals include Incheon, Pyeongtaek, Tongyeong, and Samcheok, while the firm has a small-scale regasification terminal at the Aewol port on Jeju island as well. Also, the firm is building a large terminal in Dangjin and expects to launch the first phase in December 2025. Kogas sold 34.6 million mt during 2023, down from 38.3 million mt in 2022. The firm said in its earnings report last month that residential demand decreased due to higher average temperature, while industrial demand dropped due to the economic recession. Kogas said total power generation decreased due to the economic recession and due to increase in power generation by direct LNG sourcing companies. source : www.lngprime.com

OMAN LNG, HITACHI ZOSEN INK METHANATION PACT

State-owned producer Oman LNG has signed a memorandum of understanding with Japan's engineering firm Hitachi Zosen to collaborate on methanation as part of its decarbonization drive. Hitachi Zosen said in a statement the MoU is based on a deal signed between Oman and Japan in December 2022 regarding cooperation on carbon recycling, including hydrogen, ammonia, and methanation. It aims to implement methanation equipment in Oman LNG's plant and to utilize emitted CO2 as a resource. The Japanese firm said that the two parties aim to study the commercial prospects for a small pilot plant (methanation equipment, water electrolysis equipment, etc.) at a site adjacent to the existing LNG plant and produce 1,200N

m³/h of e-methane. Methanation is a technology that produces methane, the main component of natural gas, by reacting hydrogen and carbon dioxide in a reaction vessel filled with a catalyst, it said. Oman LNG operates three LNG trains in Qalhat with a nameplate capacity of 10.4 mtpa sourcing gas from the central Oman gas field complex. Due to debottlenecking, the company's complex now has a production capacity of around 11.4 mtpa. Oman LNG, in which the government of Oman holds 51 percent, was quite busy last year and it signed shareholding deals with international companies, including Shell and TotalEnergies. Based on these agreements, Oman LNG's shareholding structure will continue with Oman Investment Authority, Shell, TotalEnergies, Korea LNG, Mitsui & Co., Mitsubishi, PTTEP, and Itochu. These agreements followed the completion of Oman LNG's large marketing campaign aimed at renewing all of its contracts post 2024. In November, Oman LNG signed a deal to supply 1 million metric tonnes per year of LNG to UK-based energy giant BP for a period of nine years starting in 2026. Source : www.lngprime.com

ARAMCO IN TALKS TO INVEST MORE IN LNG

Energy behemoth Aramco is in talks to further invest in liquefied natural gas, including in US LNG projects, according to Aramco's CEO, Amin Nasser. Saudi Arabia's Aramco made its first international investment in LNG last year to capitalize on rising LNG demand. In September, Aramco agreed to buy a minority stake in MidOcean Energy, the LNG unit of US-based energy investor EIG for \$500 million. The agreement includes the option for Aramco to increase its shareholding and associated rights in MidOcean in the future. MidOcean is currently in the process of acquiring interests in four Australian LNG projects, and it has recently also purchased a stake in LNG terminal operator Peru LNG from a unit of South Korean conglomerate SK. Asked about whether Aramco is interested in investing in LNG in the US and other countries during the company's 2023 earnings call on Monday, Nasser said, "for sure, we are interested in LNG." "We are investing in LNG via MidOcean in Australia and we are currently looking for opportunities in the US," he said. Nasser said that Aramco is "currently in discussions with different entities with regard to that growth market for capacity of LNG." Back in 2019, Aramco signed a heads of agreement with US LNG exporter Sempra for the first phase of the Port Arthur LNG project in Texas. This deal did not materialize and it included a 20-year 5 mtpa LNG supply deal and a 25 percent equity investment. Sempra Infrastructure is now building the first phase of the project but the company is also working to develop the second Porth Arthur LNG phase.

LNG expansion to come from outside markets

Aramco reported its second highest ever net income of \$121.3 billion in 2023 and is boosting its gas production in Saudi Arabia by more than 60 percent by 2030. However, the new supplies will be used for the domestic industry and also some of it will be used for blue hydrogen exports as the company is currently in discussions with customers in Japan and South Korea. The company is not currently planning to become an LNG producer. "Expansion for LNG will come from outside markets for the time being," Nasser said during the call. source : www.lngprime.com

CHINA GAS, WAH KWONG, AND CSSC SHIPPING DECIDE TO ORDER LNG CARRIER DUO

China Gas, Wah Kwong Maritime Transport, and CSSC Shipping have agreed to establish a new joint venture and order two more liquefied natural gas (LNG) carriers. Hong Kong-based natural gas operator and distributor, China Gas, said in a statement on Tuesday that its unit China City Gas has entered into a joint venture agreement with Wah Kwong Maritime's Summit Energy and CSSC (Hong Kong) Shipping's Fortune Clean Energy. China City Gas has a 30 percent stake in the JV, Summit Energy owns 45 percent, and Fortune Clean Energy owns 25 percent. According to China Gas, the Ocean Jade Investment JV will set up two wholly-owned special purpose vehicles for the purpose of acquiring and owning each of the LNG vessels to be designed and built by a third party shipbuilder. The company did not reveal the name of the yard or any additional information regarding the vessels. LNG Prime was the first to report in January, citing shipbuilding sources, that the three companies are expected to order two more LNG carriers from Dalian Shipbuilding Industry (DSIC) this year. The first JV, Sea Jade Investment, ordered two 175,000-cbm LNG carriers at DSIC in August last year.

Also, the first two vessels will feature WinGD dual-fuel low-speed engines with integrated ICER system, a reliquefaction unit, and GTT's Mark III Flex membrane containment system. DSIC is scheduled to deliver the first two vessels in 2027, and each of these ships were tipped to be worth about \$235 million.

Charter

China Gas said its unit currently expects to commit \$142.8 million in the new company. Based on its 30 percent share, it could mean that the LNG carriers are each worth a bit more than \$235 million. Following delivery, the JV's two new LNG carriers will also serve China Gas Hongda Energy Trading, a unit of China Gas, under 20-year charter deals, China Gas said. Moreover, the charter hire for each LNG carrier will be at a daily hire rate of about \$87,000 to \$100,000 per month, it said. China Gas said the company considers such rate to be "reasonable" having compared the current market rate of charter hire by reference to the type of these LNG vessels. Source : www.lngprime.com

NEXTDECADE EXPECTS FID ON FOURTH RIO GRANDE LNG TRAIN IN H2 2024

US LNG firm NextDecade still expects to take a final investment decision to build the fourth liquefaction train at its Rio Grande LNG export project in Texas in the second half of 2024. NextDecade confirmed this in its fourth quarter business update issued on Monday. The LNG firm said achieving a positive FID of this fully permitted expansion capacity at the Rio Grande LNG Facility will be subject to, among other things, finalizing and entering into EPC contracts, entering into appropriate commercial arrangements, and obtaining adequate financing to construct each train and related infrastructure. Moreover, the company has started certain pre-FID activities for train 4, including the FEED and EPC contract processes with Bechtel.

NexDecade expects to finalize the train 4 EPC contract in the first half of 2024. The company's partner TotalEnergies has LNG purchase options of 1.5 mtpa for each of train 4 and train 5. If TotalEnergies exercises its LNG purchase options, NecDecade currently estimates that an additional 3 mtpa of LNG must be contracted on a long-term basis for each train prior to making a positive FID for the respective train. NextDecade said it continues to advance commercial discussions with "various potential counterparties" and expects to finalize commercial arrangements for train 4 in the coming months to support the FID of train 4 in the second half of 2024. The firm said in a project update in November last year that it expects to sanction the fourth liquefaction train in the second half of 2024 and confirmed this target in January this year. In July, NextDecade took the final investment decision on the first three Rio Grande trains and completed \$18.4 billion project financing. It awarded the \$12 billion EPC contract to Bechtel. The firm also closed a joint venture agreement for the first phase which included about \$5.9 billion of financial commitments from Global Infrastructure Partners (GIP), GIC, Mubadala, and TotalEnergies. Phase 1, with nameplate liquefaction capacity of 17.6 mtpa, has 16.2 mtpa of long-term binding LNG sale and purchase agreements. These include deals with TotalEnergies, Shell, ENN, Engie, ExxonMobil, Guangdong Energy Group, China Gas Hongda Energy Trading, Galp, and also Itochu. Including trains 4 and 5, the Rio Grande LNG facility would have a capacity of 27 mtpa.

Financing

NextDecade expects to finance construction of train 4 utilizing a combination of debt and equity funding. The company plans to enter into bank facilities for the debt portion of the funding. In connection with consummating the Rio Grande Phase 1 equity joint venture, the company's equity partners each have options to invest in train 4 and train 5 equity, which, if exercised, would provide about 60 percent of the equity funding required for each of the trains, the company said. Inclusive of these options, NextDecade currently expects to fund 40 percent of the equity commitments for each of the trains, and to have an initial economic interest of 40 percent in each of the units, increasing to 60 percent after its equity partners achieve certain returns on their investments in each of the respective trains. The company expects to undertake the financing process for train 4 after the EPC contract and commercial arrangements are finalized.

Rio Grande LNG construction

Besides three liquefaction trains, the first phase includes building two 180,000-cbm full containment LNG storage tanks, and two jetty berthing structures designed to load LNG carriers up to 216,000 cbm in capacity. Phase 1 also includes associated site infrastructure and common facilities including feed gas pretreatment facilities, electric and water utilities, two totally enclosed ground flares for the LNG tanks and marine facilities, two ground flares for the liquefaction trains, roads, etc. As of January 2024, progress on trains 1 through 3 is in line with the schedule under the EPC contracts, NexDecade said. The overall project completion percentage for trains 1 and 2 and the common facilities of the Rio Grande LNG facility was 14.3 percent. Within this project completion percentage, engineering was 47.9 percent complete, procurement was 26.8 percent complete, and construction was 1 percent complete. The overall project completion percentage for train 3 was 4.4 percent. Engineering was

3.4 percent complete, procurement was 10.6 percent complete, and construction was 0 percent complete. Recent construction activities have included the start of train 1 foundation concrete pours, piling activity for the LNG tanks, and construction of the levee and marine offloading facility. Additionally, the civil works program has progressed via the deep soil mixing program, and “meaningful progress” has been made on the shoreline restoration program, with the majority of shoreline reclamation nearing completion, and shoreline protection work has commenced, it said. Bechtel has also made “meaningful progress” on purchase orders for train 3, NextDecade said. NextDecade holds equity interests in the Phase 1 joint venture that entitle it to receive up to 20.8 percent of the distributions of available cash during operations. source : www.lngprime.com

YPF EXPECTS FID ON FIRST PHASE OF ARGENTINA LNG PROJECT IN 2025

Argentina’s state-owned oil and gas company YPF expects to take a final investment decision on the first phase of the planned Argentina LNG export project it is developing with Malaysia’s Petronas in 2025, according to YPF’s CEO, Horacio Marin. YPF and a Petronas’ unit in Argentina signed a joint study and development agreement on September 1, 2022 to work on the potential development of the Argentina integrated LNG project, Argentina GNL, to liquefy natural gas from Vaca Muerta’s vast shale gas resources. The project will include upstream gas production, dedicated pipeline and infrastructure development, LNG production, as well as marketing and shipping. YPF initially said the first phase of the project includes a production of 5 million tonnes of LNG per year. In the future, the capacity could rise to 25–30 million tonnes of LNG per year, the firm previously said. Last year, YPF and Petronas also signed an initial land lease deal for the LNG export project with the port of Bahia Blanca in Buenos Aires to carry out technical, economic, maritime, soil, and environmental studies.

Floating LNG production units

“It is well known that Vaca Muerta has world-class gas reserves, far exceeding local demand. To capture this opportunity, unlocking our shale gas potential, we plan to lead the unique Argentinian LNG project,” Marin said during YPF’s 2023 earnings presentation on March 7. “As previously announced, the full project targets total processing capacity between 25 and 30 mtpa and should represent the key way to place Vaca Muerta shale gas in the global market, turning YPF and Argentina into a world-class LNG exporter,” he said. He said that the first stage of the project “aims to bring to Argentina an existing floating LNG facility with an initial capacity between one and two mtpa by 2027.” Marin did not provide further info on the FLNG. Petronas may move one of the company’s existing two units from Malaysia to Argentina. Currently, Petronas operates two floating LNG facilities, namely the 1.2 mtpa PFLNG Satu as well as the 1.5 mtpa PFLNG Dua, both located offshore Sabah. It has also a third FLNG with a capacity of 2 mtpa on order in South Korea. Marin said the second stage of the LNG project consists of the construction of two new floating LNG facilities, representing a capacity of around 8–9 mtpa by 2030. He said that FID on the first phase is expected by mid-2025 and “requires investments of around \$200 million on a gross basis.”

Revenues of \$15 billion

YPF's presentation shows that the third stage of the project from 2030–2032+ consists of onshore modules with a capacity of 15–20 mtpa. “Let me point out of the importance of the project once it is completed, we estimate an addition of total export revenues of \$15 billion annually to Argentina’s balance of payments,” Marin said. He said that the company expects to own 25–30 percent of the total LNG capacity. “Bearing in mind that this will be the unique Argentinian LNG project we are working nowadays in order to lead this project with our strategic partner and engaging the rest of the industry,” he said. FEED stage, additional partners Answering a question during the earnings presentation regarding the next steps for the LNG project, YPF’s VP for strategy, business development, and control, Maximiliano Westen, said that YPF is “moving into the FEED stage” with the LNG project. “We need to develop engineering, there are several packages of engineering. This year and the big part of the next year we are going to work on engineering,” he said. “We are targeting FID for the first stage of the project in mid-2025 or the second half of 2025,” Westen said. “In parallel, there are many things that need to move forward. Of course, we are open for additional partners, and also we are going to work on project financing,” he said. “Also, there is also a lot of permitting and environmental work that needs to be performed,” he added. source: www.lngprime.com

CHENIERE’S CORPUS CHRISTI LNG EXPANSION PROJECT ALMOST 53 PERCENT COMPLETE

The Stage 3 expansion project at Cheniere’s Corpus Christi LNG export plant in Texas is almost 53 percent complete, and the US LNG exporting giant is working to start production at the first train later this year. Cheniere’s Corpus Christi liquefaction plant now has three operational trains with each having a capacity of about 5 mtpa. In June 2022, Cheniere took a final investment decision on the Corpus Christi Stage 3 expansion project worth about \$8 billion and compatriot Bechtel officially started construction on the project in October the same year. The project was 51.4 percent complete in December last year. It includes building seven midscale trains, each with an expected liquefaction capacity of about 1.49 mtpa. Cheniere’s unit Corpus Christi Liquefaction said in the January construction report filed with the US FERC last week that overall project completion for the Stage 3 project is 52.7 percent. Stage 3 engineering and procurement are 86 percent and 72.9 percent complete, respectively, while subcontract and direct hire construction work are 69.5 percent and 12.3 percent complete, respectively.

First train work continues to progress

During January, CCL’s contractor Bechtel continued piling activities, road improvements, drainage work and mobilization of temporary facilities, equipment. Piling activities continued in trains 5 and 6. Concrete work in train 1 is “significantly complete” and underway in train 2, train 3, and OSBL, the company said. Moreover, structural steel in train 1 is over halfway complete and has started in train 2 and OSBL, it said. Underground piping is progressing in train 1, 2, 3, and OSBL and has started in

train 4, while aboveground piping is progressing in train 1, train 2, and OSBL West. CCL said equipment setting is ongoing in Train 1 and Train 2.

First LNG production by end of 2024

Cheniere initially said that LNG deliveries from the expansion project were expected to begin in 2025 with full production in 2027. However, Cheniere's CEO Jack Fusco said in August last year that the company is expecting to complete the expansion phase ahead of schedule. The company also confirmed in its 2023 report that it that it expects to achieve first LNG production from the first train at the end of 2024. Besides this expansion, Cheniere plans to build two more liquefaction trains as part of the third expansion phase at the Corpus Christi plant. The firm's results show that it aims to take a final investment decision on CCL midscale trains 8 and 9 in 2025, subject to regulatory approvals. In addition, Cheniere also aims to build two new liquefaction trains as part of the Sabine Pass Stage 5 expansion project to add up to 20 mtpa of capacity to the giant facility. Cheniere plans to take FID on this project in 2026, subject to regulatory approvals. source : www.lngprime.com

SPANISH LNG IMPORTS, RELOADS DOWN IN FEBRUARY

Spanish liquefied natural gas (LNG) imports and reloads decreased in February compared to the same month last year, according to Enagas. LNG imports decreased by 14.3 percent to about 18.4 TWh in February and accounted for 67.8 percent of the total gas imports. In January, LNG imports reached some 20 TWh. Including pipeline imports from Algeria, France, and Portugal, gas imports to Spain reached about 31.5 TWh last month, a slight drop from some 31.8 TWh in February last year, Enagas said in its monthly report. Moreover, national gas demand in February decreased by 17 percent year-on-year to some 27.8 TWh. Demand for power generation dipped by 50.5 percent year-on-year to about 4.45 TWh last month, while conventional demand decreased by 4.7 percent to 23.3 TWh, the LNG terminal operator said. Storage facilities were were 79 percent full in February, compared to 81 percent in the same month last year, according to Enagas. Enagas operates a large network of gas pipelines and has four LNG import plants in Barcelona, Huelva, Cartagena, and Gijon. It also owns 50 percent of the BBG regasification plant in Bilbao and 72.5 percent of the Sagunto plant, while Reganosa operates the Mugardos plant. In August last year, Spanish power group Endesa delivered the first commercial cargo to the El Musel LNG terminal in Gijon. Enagas awarded the logistics services contract to Endesa in July and it also completed the sale of a 25 percent stake in the

El Musel LNG terminal to Reganosa.

US and Russia biggest LNG suppliers , The seven operational Spanish LNG regasification terminals, unloaded 27 cargoes last month, up by six cargoes compared to February last year, the data shows. The US was the biggest LNG supplier to Spain in February with about 8 TWh, up from 7.2 TWh last year, followed by Russia with 5.3 TWh, a slight decrease from 5.4 TWh last year. US was the biggest LNG supplier to Spain January as well while Russia was the biggest LNG supplier in December. Prior to that, US was the biggest supplier to Spain in October and November. Besides the US and Russia, Spanish LNG



terminals also received 5 TWh from Nigeria in February, up from 2.7 TWh in the same month last year, and also 0.92 TWh from Norway, 0.87 TWh from Qatar, and 0.49 TWh from Algeria.

LNG reloads drop

Spanish LNG terminals loaded about 1.07 TWh in February, down 31 percent compared to some 1.5 TWh in February 2023 and slightly up from 0.92 TWh in January. The Sagunto LNG terminal reloaded about 0.79 TWh of LNG, followed by the Barcelona terminal with about 0.22 TWh. Moreover, the number of truck loads at the LNG terminals rose by 10 percent year-on-year to 1078. The Huelva LNG terminal completed 215 truck loads in February, while the Cartagena terminal completed 211 truck loads and the Barcelona terminal completed 210 truck loads. source : www.lngprime.com

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