

U.S. LNG Export Projects Update

CHENIERE ENERGY

■ Company News

During Cheniere Energy's quarterly/annual earnings call (Feb. 28) President & CEO Jack Fusco said: "The fourth quarter of 2016 was another milestone quarter for Cheniere, as today we report financial results driven by nearly a full quarter of LNG production from the first two trains at Sabine Pass. Transition and execution will remain central themes for Cheniere in 2017, as we expect Trains 3 and 4 at Sabine Pass to begin commercial operations, with Train 3 having produced its first commissioning cargo in January."

■ Sabine Pass Liquefaction (Louisiana)

Cheniere's monthly progress report (Mar. 27) to the Federal Energy Regulatory Commission (FERC) stated that Stage Two of the project (Trains 3 & 4) is 96.7% complete and Stage Three (Train 5) is 60.5% complete. Cheniere also received permission from FERC (Mar. 24) to introduce feed gas into Train 4 to begin commissioning. Earlier this month (Mar. 22), FERC granted Cheniere's request to put Train 3 into service. According to Genscape, "The capacity holders [KOGAS 3.5 mtpa and Shell 0.7 mtpa] at Train 3 have 180 days before they need to begin the terms of their 20 year free on board (FOB) contract with Cheniere. During this time KOGAS and Shell have "first right of refusal" on any LNG cargoes.

■ Corpus Christi Liquefaction (Texas)

In the monthly FERC report (Mar. 21), Cheniere said that Trains 1 and 2 at Corpus Christi have reached overall completion of 56.6%. According to the report, "construction focused on progressing permanent plant concrete and steel, underground pipe, above ground pipe, and equipment installation. Major highlights included setting Train 1 compressors and BOG/Utility substation. Concrete placement for Tank A was completed and work commenced for Tank A and C inner shell construction." CEO Fusco said (Feb. 28) that Cheniere



expects substantial completion of Train 1 in the first half of 2019 and Train 2 in the second half of that same year.

SEMPRA LNG & MIDSTREAM

■ Cameron LNG

In its most recent progress report to FERC (Mar. 17), Cameron LNG reported that in February, 2017, "construction activities consisted of civil works, structural steel erection, fireproofing work, installation of equipment, tanks and piping, electrical and instrument works, and tie-in works within the existing facility." Cameron LNG has been approved for construction of five liquefaction trains at the project site in Louisiana. The project sponsors have taken FID on the first three trains which will have a combined output of ≈ 15 mtpa. According to Cameron LNG's website, commercial operations are expected for Train 1, 2 and 3 in early, mid and end of 2018, respectively.

TELLURIAN■ **Company News**

Tellurian, Inc. announced (Mar. 10) that they have selected SG Americas Securities, LLC to provide general financial strategy and planning for the development and financing of Driftwood LNG, Tellurian's 26 mtpa LNG export project near Lake Charles, Louisiana. SG Americas is the U.S. broker-dealer subsidiary of Société Générale Corporate and Investment Banking, the investment banking arm of Société Générale, a leading provider of global finance, investment banking, and global markets services worldwide.

■ **Driftwood LNG**

The U.S. Department of Energy (DOE) approved (Mar. 01) the application filed by Tellurian to export LNG to nations with which the United States has a free trade agreement (FTA nations). The volume authorized for export is 26 mtpa ($\approx 1,496.5$ Bcf/year of natural gas) for a 30-year term.

DELFIN LNG & MIDSTREAM■ **Delfin LNG (Offshore Louisiana)**

(Mar. 13) The U.S. Maritime Administration (MARAD) granted the application by Delfin LNG for a license to build and operate a deepwater port about 40 miles offshore of the coast of Louisiana. Delfin will reuse and repurpose two existing offshore natural gas pipelines and certain on-shore facilities. The feed gas will be supplied through new pipeline laterals to each of four Floating Liquefied Natural Gas Vessels (FLNGVs) where it will be used to produce LNG. The LNG will be stored onboard the FLNGVs and transferred to LNG trading carriers for export. Each of the FLNGVs will

be semi-permanently moored to four new "weathervaning turret yoke mooring systems." The FLNGVs will be self-propelled vessels with the ability to disconnect from the moorings and set sail to avoid hurricanes or to facilitate inspections, maintenance, and repairs. Each of the four FLNGVs will process ≈ 146 bcf of natural gas per year. Together, the four FLNGVs are designed to have the capability to produce ≈ 12 mtpa of LNG. Delfin advised MARAD that Port operations are expected to commence no earlier than July 2019 with the commissioning of the first FLNGV and TYMS. The Port is expected to be fully operational by July 2022. Delfin LNG also advised that the time frame for full build-out is contingent upon the company's ability to obtain final permits and financing. In making the approval, MARAD noted: "Delfin LNG brings together an experienced team of offshore energy (facility and pipeline) development engineers, managers, and financial backers. It is clear from the responsiveness to [our] requests for information that Delfin's LNG team understands the statutory and regulatory framework under which construction and operations of the Port is governed." Delfin LNG now awaits a license from DOE to export LNG to nations with which the United States does not have a free trade agreement (non-FTA nations).

G2 LNG■ **G2 LNG (Louisiana)**

G2 LNG announced (Mar. 8) that it will expand its planned facility along the Calcasieu Ship Channel to meet the demands of potential customers. "The expansion of our Cameron Parish, Louisiana, location is in direct response to our customers' increasing demands for both LNG and petrochemicals," said former Louisiana governor Buddy Roemer, chairman of G2 LNG. "We are excited to exercise this land option, increase our overall footprint, and move forward with one of the largest overall projects the State of Louisiana has ever seen." With the expansion, the G2 LNG export facility will cover 1,266 acres of land. The company plans to export up to 14 mtpa of LNG when the project is complete.

GOLDEN PASS PRODUCTS■ **Golden Pass Products (Texas)**

Golden Pass Products (GPP) is the next LNG export project in line for a DOE license to export natural gas to non-FTA nations. FERC approved the GPP application

**ABOUT US**

LNG Allies is a nonprofit organization working to expedite and maximize LNG exports to create U.S. jobs and economic growth, enhance the energy security of America's allies, and improve economic and environmental conditions worldwide.

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on Dec. 22, 2016, and no request for rehearing of the FERC authorization was received by the agency within the 30-day deadline for such requests. DOE granted Golden Pass a license to export LNG to FTA nations on Sept. 27, 2012. The GPP LNG export project is located on the Sabine-Neches Waterway and is owned jointly by Qatar Petroleum (70%) and ExxonMobil (30%). The project will produce 15 mtpa of LNG when in service.

VERESEN

■ Jordan Cove LNG (Oregon)

As part of the FERC pre-filing process, Jordan Cove LNG recently completed (Mar. 24) a series of four “open house” meetings near the project site in Oregon. In a conference call (Mar. 1), Veresen CEO Donald Althoff was upbeat about the prospects of the project going forward. “Having visited Washington twice in the last few weeks and through our discussions with FERC, we feel that the attitude on Capitol Hill towards projects of this nature shifted,” Althoff said. “Jordan Cove is good for American jobs, supports American exports, and helps trade balances with foreign buyers. These are considered to be top priorities for the current administration.” Jordan Cove was granted pre-filing status for the relaunched project in February. Althoff said the company intends to submit its formal FERC application in the second half of 2017. The company has gained commercial control over its proposed Pacific Connector Gas Pipeline to bring gas to the LNG facility, which was one stumbling block in its initial application. They have also optimized the facility design, removing the need for a dedicated power plant at Jordan Cove, thereby reducing the project’s footprint and environmental impact. Jordan Cove, which is a venture wholly owned by Veresen, would take gas from the U.S. Rockies and western Canada (giving those producers a needed boost in demand) and export it as LNG to the Pacific Rim.

OTHER U.S. LNG EXPORT COMPANIES & PROJECTS

■ Cove Point Liquefaction (Maryland)

Dominion Resources notes on its website (Mar. 30) that the Cove Point Liquefaction project is now 84% complete and “on track for an in-service date in late 2017.” There are currently 3,200 construction workers on site.

■ Elba Island Liquefaction (Georgia)

Kinder Morgan announced (Feb. 28) that investment funds managed by EIG Global Energy Partners have become a 49% joint venture participant in Elba Liquefaction Co. which will own 10 liquefaction units to be constructed for the proposed Elba Liquefaction Project at Kinder Morgan’s existing Elba Island LNG terminal near Savannah, Georgia.

■ Freeport LNG (Texas)

In a letter (Mar. 23) to FERC, attorneys for Freeport LNG requested permission to increase the labor force at the company’s Quintana Island, Texas, project: “While construction of the [project] is ongoing, it has fallen behind schedule due to delays in fabrication and delivery of materials.” Thus, Freeport wants to increase the number of workers from 3,950 to 5,800 and permit more night shifts. The letter states that “minimal to minor” environmental impacts would result from the requested increases.

■ Magnolia LNG (Louisiana)

The Lake Charles Harbor and Terminal District approved (Mar. 27) Magnolia LNG’s request to finalize the ground lease for Magnolia’s liquefaction and export project in the Port of Lake Charles, Louisiana. Magnolia has received licenses from both FERC and DOE.

■ NextDecade (Company)

NextDecade announced (Mar. 13) a proposed \$1 billion merger with blank-check company Harmony Merger Corp. to pave the way for the LNG developer to tap public markets as it funds the planned 27 mtpa Rio Grande LNG export terminal in Brownsville, Texas.

■ Texas LNG (Texas)

Texas LNG said (Mar. 02) that it had selected Samsung Engineering Co. and KBR Inc. to provide pre-FID detailed engineering and post-FID engineering, procurement, and construction services for its proposed 4 mtpa LNG export facility at the Port of Brownsville, Texas.

■ Venture Global Plaquemines LNG (Louisiana)

Venture Global filed (Mar. 02) a formal application with FERC to build the Plaquemines LNG facility on a 632 acre site in Plaquemines Parish, Louisiana.

