

U.S. LNG Export Projects Update

CHENIERE ENERGY

■ Company News

On June 7, senior leaders of the Polish government and executives from Cheniere commemorated the first shipment of U.S. LNG to Central and Eastern Europe as the *Clean Ocean* unloaded its cargo at the Lech Kaczyński LNG Terminal at the Port of Świnoujście on Poland's Baltic Sea coast. The cargo was sold under a spot contract between Cheniere Energy and the Polish National Oil and Gas Co. (PGNiG).

Later, on June 26, it was announced that the first U.S. LNG cargo to Lithuania will be shipped by Cheniere to the Klaipėda LNG import terminal later this summer. Lithuanian Energy Minister Žygimantas Vaičiūnas said: "I can boldly call this a historic moment. It proves that Lithuania [can] import gas from all over the world and offer a competitive price for it to the entire region. It is also historical that it is the first time when LNG brought through [the Klaipėda terminal will] be stored in Inčukalns natural gas storage facility in Latvia, where the gas market was liberalized just a few months ago."

In other company news, Cheniere announced on June 2 that it has achieved "important regulatory and financial milestones" related to the development of the 200-mile 36-inch "Midship" interstate natural gas pipeline project. Cheniere has formally filed its FERC application and entered into financial agreements with investment funds managed by EIG Global Energy Partners. The Midship pipeline will connect production from the Anadarko Basin in Oklahoma to growing Gulf Coast and Southeast markets.

■ Cheniere Sabine Pass (Louisiana)

Cheniere Energy CEO Jack Fusco and Korea Gas Corp. (KOGAS) CEO Seung-Hoon Lee celebrated commencement of the KOGAS-Cheniere contract at Cheniere's Sabine Pass facility on June 25. The 20-year sales and



purchase agreement was signed in January 2012 and officially commenced on June 1, 2017, with the first cargo loading the following day. Cheniere's Sabine Pass facility has three liquefaction trains operating, two more are under construction, and a sixth that is fully permitted. Each train has a nominal capacity of about 4.5 million tons per annum (mtpa).

■ Cheniere Corpus Christi Texas)

The latest progress report (June 21) submitted by Cheniere to the Federal Energy Regulatory Commission (FERC) indicates progress on Trains 1 and 2 of Corpus Christi liquefaction project as follows: (1) engineering has progressed to 100.0%; (2) procurement has progressed to 86.9%; and (3) subcontract and direct hire construction work are 34.2% and 37.0% complete, respectively. At this point, the total project has progressed to 65.6% complete against the plan of 65.3%.

SEMPRA LNG & MIDSTREAM

■ Cameron LNG (Louisiana)

In its most recent progress report, to FERC (June 21) Cameron LNG states that during the month of May, 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."

■ Port Arthur LNG (Texas)

Sempra LNG & Midstream and Woodside Energy (USA) signed a MOU with KOGAS on June 29, regarding the development of the proposed Port Arthur LNG liquefaction project in Port Arthur, Texas. According to the Sempra news release: “The MOU provides a framework for cooperation and joint discussion by the parties regarding key aspects of the Port Arthur LNG project, including engineering and construction works, operations and maintenance activities, feed gas sourcing, offtake of LNG, and KOGAS as a potential purchaser of LNG from, and equity participant in, the project.”

DELFIN MIDSTREAM

■ Delfin LNG (Offshore Louisiana)

Delfin Midstream and Golar LNG announced on June 21 that they had executed a joint development agreement to develop the Delfin LNG project, off the coast of Cameron Parish, Louisiana, utilizing Golar’s floating liquefaction (FLNG) technology. The agreement will facilitate the financing, marketing, construction, development, and operation of Delfin LNG, the first and only permitted floating LNG export project in the United States. Delfin LNG is a brownfield deepwater port requiring little additional infrastructure investment to support up to four FLNG vessels producing up to 13 mtpa of LNG. Delfin purchased the UTOS pipeline—the largest natural gas pipeline in the Gulf of Mexico—in 2014 and submitted its Deepwater Port license application to the U.S. Maritime Administration in 2015. Delfin LNG received a positive record of decision from MARAD on March 13 and authorization

from DOE to export LNG from the project to non-FTA nations on June 1.

VERESEN

■ Jordan Cove LNG (Oregon)

In early June KBJ, a joint venture of Kiewit Energy Group, Black & Veatch Construction, and JGC U.S. Projects, announced that they had secured an engineering, procurement, and construction (EPC) services contract for the Jordan Cove project. Under the deal, KBJ will provide engineering and construction services for an LNG export terminal in Coos Bay, Oregon. Situated on an undeveloped 400 acre industrial site on the North Spit of lower Coos Bay, the proposed Jordan Cove LNG terminal is the most advanced LNG export terminal project on the west coast of North America. It is expected to produce up to 8 mtpa of LNG for export. The project will also include around 320,000 cubic meters of storage capacity and deep-water marine facilities. Complete construction of the project is expected to take around 53 months, and will need around 2,000 construction workers at peak.

In late June, a delegation of civic and business leaders from Western Colorado went to Washington D.C. to show support for the Jordan Cove LNG project in Coos Bay, Oregon. The Jordan Cove project would allow Western Colorado to help supply foreign countries with natural gas the supporters said. “The Piceance Basin is the second largest natural gas reserve in the United States... so we have a product to offer our Asian counterparts, our allies, who are in desperate need of energy,” said David Ludlam, West Slope Colorado Oil & Gas Ass’n director.

OTHER U.S. LNG EXPORT COMPANIES & PROJECTS

■ Alaska LNG (Alaska)

Alaska Gasline Development Corp. (AGDC) announced on June 28 that it had signed an MOU with KOGAS, stating that: “The MOU establishes a framework for AGDC and KOGAS to cooperate in several areas of Alaska LNG, including project investment, development, operations, and other arrangements.”

■ Freeport LNG (Texas)

On June 29, Freeport LNG filed a formal application with FERC to construct a fourth liquefaction train at the company’s project site in Brazos County, Texas.



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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■ Lake Charles LNG (Louisiana)

Two long-term applications to export an additional 0.33 bcf/d of LNG) from the Lake Charles LNG project in Louisiana were approved by DOE on June 29. DOE previously authorized exports of up to 2 bcf/d worldwide for the project. Also, on June 29, the Lake Charles project sponsors (Equity Transfer and Shell) signed a non-binding MOU with KOGAS “to study the feasibility of joint participation in the Lake Charles project.”

■ LNG Ltd. (Magnolia LNG)

According to the company, the Magnolia LNG project in Lake Charles, Louisiana, continues to take necessary steps to maintain “ready for construction” status while completing arrangements to secure offtake commitments for the 8 mtpa (or greater) facility. Recent developments include receiving the FERC Notice to Proceed authorization for initial site preparation works, extension of the Louisiana Department of Environmental Quality air permit to construct for an additional 18 months, extension of the project lump sum turn key EPC contract validity with KSJV (KBR and SK E&C) until the end of December 2017, and expanding the equity commitment from Stonepeak Partners LP to cover the full \$1.5 billion in project equity for the entire 8 mtpa. Magnolia also formally executed their longstanding option for the site ground lease agreement with the Lake Charles Harbor & Terminal District.

■ Venture Global LNG (Company News)

Venture Global LNG announced on May 25 that it has raised an additional \$81.4 million, in its sixth round of equity investment. The offering brings the company’s aggregate funding total to \$361 million.

