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LNG in World Markets

Cheniere Seeks 20-MMt/y Expansion at Sabine Pass

Cheniere Energy, the largest US LNG exporter, is now seeking permission from federal regulators to add another 20 MMt/y of LNG production and export capacity at the company's Sabine Pass LNG export terminal in Louisiana.

If the proposed Sabine Pass project and a fourth round of expansions at Corpus Christi LNG in Texas are approved and built, Cheniere will have a combined production capacity of 78.3 MMt/y at the beginning of the next decade – meaning that the company will be able to produce more LNG than every exporting nation except Qatar and Australia. With an operating track record, Cheniere has advantages over some of its US competitors, although like other producers it will face tough competition from 2028 when the market is expected to be long.

The Houston-based exporter currently has 45 MMt/y of LNG production capacity between Sabine Pass and Corpus Christi. The company is in the middle of construction for its Corpus Christi Stage 3 project, which will add seven midscale trains with a combined 10 MMt/y of capacity and a storage tank with 160,000 m³ of capacity. General contractor Bechtel is nearly 25% complete with the project and initial production is expected by the end of 2025.

Cheniere is seeking permission to add two more midscale trains at Corpus Christi that will produce another 3.3 MMt/y of LNG, in addition to the 20 MMt/y at Sabine Pass.

Prefiling process starts for Sabine Pass Stage 5

Cheniere began the prefiling process with the Federal Energy Regulatory Commission (FERC) on Feb. 23 for its Sabine Pass Stage 5 expansion project. The company is seeking to add three large-scale liquefaction trains that will each produce around 6.5 MMt/y of LNG. It is also seeking to add two storage tanks with a combined capacity of 440,000 m³ as well as a boil off gas reliquefaction unit with a capacity of 0.75 MMt/y.

Cheniere already has three berths at Sabine Pass and is not seeking to add another as part of the proposed expansion project. Instead, the company is seeking to optimize loading capabilities and increase the 12,000 m³/hour loading rates at its existing docks.

The Louisiana export terminal is currently authorized to handle 580 calls from LNG carriers but is seeking to increase that number to 740 calls per year. Cheniere has already tapped its longtime project contractor, Bechtel, to handle the front-end engineering design work for the project.

The company expects to file its formal FERC application by the end of this year and begin construction by 4Q 2025. If all stays on schedule, initial production will begin in 2030 and the completed project will be in service by 2H 2032.

Corpus Christi to add midscale Trains 8 & 9

Cheniere is adding seven midscale LNG trains as part of its Corpus Christi Stage 3 expansion project but began the FERC pre-filing process on Aug. 19, 2022, to add two more in a project dubbed Midscale Trains 8 & 9. The two new trains will add 3.3 MMT/y of capacity at the plant. The company was to add a new storage tank and then walked back those plans, instead opting to route the proposed production to an already existing tank.

Corpus Christi LNG has two berths and neither the Stage 3 expansion nor the Midscale Trains 8 & 9 project require adding a new one. Instead, the company is seeking to optimize loading and increase the 12,000 m³/hour loading rates at its already-existing docks.

The Texas export terminal is currently authorized to handle 400 calls from LNG carriers but is seeking to increase that number to 480 calls per year. Cheniere expects to file its formal application for the Corpus Christi project by the end of 1Q 2023 and begin construction by October 2024. The project has an in-service date of 2H 2031.

Project outlooks

The market reacted positively to Cheniere's Sabine Pass expansion announcement, which was timed for its fourth quarter and end-of-year earnings call where the company's earnings beat analyst expectations. The company's shares rose more than 9% on the news.

Cheniere has hundreds of acres of land at both Sabine Pass and Corpus Christi to handle expansions. The expansion projects are opposed by environmentalists, community groups, Native Americans and others who argue that the Gulf Coast is being sacrificed for exports that also drive up domestic natural gas prices. The expansion at Sabine Pass is being designed with waste heat recovery features and carbon capture for acid gas removal units but that is not likely to assuage opponents.

The timing of the projects could place Cheniere in the so-called "last wave of US LNG projects" that are slated to begin production in 2029 or the early 2030s. Given the market's trust in Cheniere and ease of brownfield development compared to building a greenfield project, the Sabine Pass and Corpus Christi expansions could hurt competitors on the US Gulf Coast.

To secure financing, the proposed expansion projects will require 15-20- year contracts that will push demand for LNG to 2050 and beyond. With 370 MMT/y of LNG regasification capacity under development, Cheniere says Vietnam, the Philippines and Ghana will be among the nine new countries to begin importing LNG by 2024.

Cheniere Expansion Projects

Project Name	Corpus Christi Stage 3	Corpus Christi Midscale Trains 8 & 9	Sabine Pass Stage 5
Status	Under Construction	Pre-Filing	Pre-Filing
New Production Capacity (MMt/y)	10.0	3.3	20.0
Gas Demand (Bcf/d)	1.3	0.4	2.7
Number of New Trains	7	2	3
Train Types	Midscale	Midscale	Large-Scale
New Storage Capacity (m ³)	160,000	0	440,000
Number of New Storage Tanks	1	0	2
Pre-Filing Date	June 1, 2015	Aug. 19, 2022	Feb. 23, 2023
FERC Application Date	June 28, 2018	1Q 2023	End of 2023
Expected First LNG	End of 2025	2031	2030