

**COMMENTS OF
VENTURE GLOBAL LNG, INC.
ON 2024 LNG EXPORT STUDY**

Pursuant to the notice issued by the Office of Fossil Energy and Carbon Management, Department of Energy (“DOE”),¹ Venture Global LNG, Inc. (“Venture Global”) hereby submits these comments on the *Energy, Economic, and Environmental Assessment of U.S. LNG Exports* issued by DOE in December 2024 (the “2024 LNG Export Study” or “2024 Study”). DOE invited comments on the 2024 Study and how it should be applied going forward to inform DOE’s public interest analysis when considering requested authorizations to export liquefied natural gas (“LNG”) to nations with which the United States has not entered into a Free Trade Agreement (“FTA”) requiring the national treatment of natural gas.

Venture Global is a leading developer of LNG export projects, is currently exporting LNG from two LNG terminals in Louisiana, and has two non-FTA export applications pending before DOE that are ripe for approval as well as a recent authorization conditioned on the outcome of this proceeding² – giving it an obvious and significant interest in DOE’s use of the 2024 LNG Export Study. From Venture Global’s perspective, the 2024 Study fails to recognize some of the important benefits of LNG exports while, conversely, overstating some potentially adverse impacts of those exports and overemphasizing certain issues of dubious importance. The portions of the 2024 Study that should be of most interest to DOE are those focusing particularly on the aspects of the public interest that President Trump has directed DOE to consider in its

¹ Notice of Availability of the 2024 LNG Export Study and request for comments, 89 Fed. Reg. 104,132 (Dec. 20, 2024).

² The Notice of Availability of the 2024 Study was placed in the record of numerous pending DOE dockets including those of: Venture Global Calcasieu Pass, LLC (“Calcasieu Pass”) in Docket Nos. 13-69-LNG, 14-88-LNG, & 15-25-LNG; Venture Global Plaquemines LNG, LLC (“Plaquemines LNG”) in Docket No. 16-28-LNG; and Venture Global CP2 LNG, LLC (“CP2 LNG”) in Docket No. 21-131-LNG. On March 19, 2024, DOE *conditionally* granted non-FTA authorization for CP2 LNG, explaining that the issues addressed in that order will be reexamined in a final order informed by this proceeding regarding the 2024 Study. *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 5264, Docket No. 21-131-LNG at 7-8 (Mar. 19, 2025).

review of export applications: *i.e.*, “the economic and employment impacts to the United States and the impact to the security of allies and partners that would result from granting the application.”³

Regardless of how it is considered, however, the 2024 Study in no way shows or even suggests that LNG exports “will not be consistent with the public interest” – which, of course, is the legal standard under Section 3(a) of the Natural Gas Act (“NGA”) for non-FTA export authorizations.⁴ Therefore, while DOE certainly should take into consideration the 2024 LNG Export Study and public comments on it as DOE returns to “regular order” in its processing of LNG export applications,⁵ the 2024 Study should in no way alter DOE’s long-standing conclusion that LNG exports to non-FTA nations are consistent with the public interest and

³ See Executive Order, *Unleashing American Energy*, 86 Fed. Reg. 7037, Sec. 8(a) (Jan. 20, 2025), available at: <https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/> (“The Secretary of Energy is directed [to] restart reviews of applications for approvals of [liquefied] natural gas export projects as expeditiously as possible, consistent with applicable law. In assessing the ‘Public Interest’ to be advanced by any particular application, the Secretary of Energy shall consider the economic and employment impacts to the United States and the impact to the security of allies and partners that would result from granting the application.”).

Relatedly, another Day 1 Executive Order recognized that “the United States has the potential to use its unrealized energy resources domestically, and to sell to international allies and partners a reliable, diversified, and affordable supply of energy. This would create jobs and economic prosperity for Americans forgotten in the present economy, improve the United States’ trade balance, help our country compete with hostile foreign powers, strengthen relations with allies and partners, and support international peace and security.” Executive Order, *Declaring a National Energy Emergency* (Jan. 20, 2025), available at: <https://www.whitehouse.gov/presidential-actions/2025/01/declaring-a-national-energy-emergency/>.

⁴ 15 U.S.C. § 717b(a) (2006). This statutory language creates a presumption that the proposed export of natural gas is in the public interest. DOE has consistently held that it must grant export applications unless opponents of an application overcome this presumption by making an affirmative demonstration that the proposed export is inconsistent with the public interest. *E.g.*, *Philips Alaska Natural Gas Corp. & Marathon Oil Co.*, DOE/FE Order No. 1473 at 13 (Apr. 2, 1999); *Venture Global Calcasieu Pass, LLC*, DOE/FE Order No. 4346 at 19 (Mar. 5, 2019); *Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 4446 at 18-19 (Oct. 16, 2019). This statutory interpretation has been affirmed by the U.S. Court of Appeals for the District of Columbia Circuit. *E.g.*, *Sierra Club v. U.S. Dep’t of Energy*, 867 F.3d 189 at 203 (D.C. Cir. 2017).

⁵ See first Secretarial Order of DOE Secretary Wright, *Unleashing the Golden Era of American Energy Dominance*, (Feb. 5, 2025) at P 3 (“Return to Regular Order on LNG Exports”), available at: <https://www.energy.gov/articles/secretary-wright-acts-unleash-golden-era-american-energy-dominance#:~:text=American%20Energy%20Dominance%E2%80%9D-Secretary%20Wright%20Acts%20to%20%E2%80%9CUnleash%20Golden%20Era%20of%20American%20Energy,with%20President%20Trump%27s%20executive%20orders>.

should be authorized.⁶ Furthermore, DOE should as soon as possible issue a final order authorizing non-FTA exports by CP2 LNG, explaining that the 2024 Study, properly considered along with the public comments on it, does not alter DOE’s conclusions and removing the conditionality of its March 19, 2025 authorization.⁷

I. Venture Global’s Projects, DOE Authorizations, and Pending Applications

Venture Global is the leading developer of LNG export projects using standardized, modular mid-scale plant designs with reliable, proven technology and innovative design configuration to offer low cost, clean and reliable U.S. natural gas supplies to the world. Since the second half of 2019, Venture Global and its subsidiaries have reached final investment decision, or FID, on its first two projects in Louisiana – the Calcasieu Pass project located in Cameron Parish, Louisiana and the Plaquemines LNG project located in Plaquemines Parish, Louisiana.

Together with our subsidiaries, we have raised over \$56 billion of capital to date and have assembled a world-class team of over 1,500 employees. We also have executed long-term LNG sales and purchase agreements, or SPAs, for 39.25 million metric tonnes per annum (“mtpa”) that will commence once we achieve the commercial operation date, or COD, of the relevant project or phase. These post-COD SPAs – with a well-recognized and diverse set of third party customers constituting one of the strongest portfolios of institutional LNG buyers in the world – encompass the entire expected nameplate capacity of Calcasieu Pass (10 mtpa) and Plaquemines LNG (20 mtpa), as well as 9.25 mtpa of the CP2 LNG project.

⁶A list of the many DOE orders authorizing long-term exports to non-FTA nations, with docket numbers and links to the orders, is available on the DOE/FECM website at: https://www.energy.gov/sites/default/files/2025-01/Summary%20of%20LNG%20Export%20Applications_1.22.25.pdf.

⁷ See n.2, *supra*. In the event that, prior to finalizing its consideration of the 2024 Study, DOE issues *conditional* non-FTA authorizations for the pending “uprate” authorizations for Calcasieu Pass and Plaquemines LNG (described below), those conditions similarly should be eliminated as soon as possible.

Calcasieu Pass has been exporting LNG since March of 2022, and has exported more than 400 cargos of LNG, with approximately 70 percent of them delivered to Europe. Venture Global is proud to have brought incremental LNG supplies produced in America to the market at a critical time, in particular for European consumers following Russia’s invasion of Ukraine.

Calcasieu Pass is authorized by DOE to export a total volume of up to 620 Billion cubic feet per year (“Bcf/yr”) of natural gas (equivalent to about 12 mtpa of LNG) under its non-FTA authorization issued in 2019.⁸ In December 2021, we filed with DOE to increase that export authorization to 640.666 Bcf/yr (or 12.4 mtpa), without any change in the facilities or operations but rather only to reflect the actual, refined peak liquefaction capacity of the project. DOE authorized this increased volume for exports to FTA nations in April 2022,⁹ and the Federal Energy Regulatory Commission (“FERC”) approved the “uprate” in the capacity of the facilities in September 2023.¹⁰ Yet, DOE has not yet authorized the requested, higher level of non-FTA exports, limiting our ability to export LNG from Calcasieu Pass.

Our second project, Plaquemines LNG, is at an advanced stage of construction and on-going commissioning and it began LNG production in December 2024 and exported its first commissioning cargo later that same month. As construction continues, we currently are producing LNG from Plaquemines LNG’s first nine liquefaction blocks (18 trains). We expect to begin producing LNG from all the additional liquefaction trains (almost all of which are

⁸ *Venture Global Calcasieu Pass, LLC*, DOE/FE Order No. 4346, Docket Nos. 13-69-LNG, 14-88-LNG, and 15-25-LNG (Consolidated), Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Mar. 5, 2019), *amended by* DOE/FE Order No. 4346-A (Oct. 21, 2020) (extending export term through 2050).

⁹ *Venture Global Calcasieu Pass, LLC*, DOE/FECM Order No. 3662-B, Docket No. 15-25- LNG, Order Amending Long-Term Authorization to Export Liquefied Natural Gas to Free Trade Agreement Nations (Apr. 22, 2022) (increasing that FTA authorization from 132.8 Bcf/yr to 153.466 Bcf/yr). Calcasieu Pass also has two other FTA authorizations, issued earlier in Docket Nos. 13-69-LNG and 14-18-LNG, and the three authorizations in aggregate authorize the total exports of 640.666 Bcf/yr to FTA countries.

¹⁰ *Venture Global Calcasieu Pass, LLC*, 184 FERC ¶ 61,185 (2023).

already on site) over the course of this year, with the requisite FERC approvals. We have already exported more than 20 LNG cargos from Plaquemines LNG.

Plaquemines LNG is authorized by DOE to export LNG to both FTA and non-FTA nations in a volume equivalent to 1,240 Bcf/yr of natural gas, which is approximately 24.0 mtpa of LNG.¹¹ In March of 2022, Plaquemines LNG filed for an uprate to increase its authorized volume of exports to 1,405.33 Bcf/yr (or 27.2 mtpa) to reflect a refined analysis of the peak liquefaction capacity of the authorized Project facilities. DOE amended Plaquemines LNG's FTA export authorization accordingly,¹² and FERC approved the uprate of the facilities this February.¹³ Thus, just as with the pending Calcasieu Pass uprate, Plaquemines LNG's application for increased export volumes is ripe for action by DOE. Continued delay in its approval may limit exports from the facility.

Venture Global is ready and eager to commence on-site construction of its third project, CP2 LNG: indeed, it has been ready for a considerable time while the project has been awaiting regulatory approvals.¹⁴ FERC authorized the siting, construction, and operation of the CP2 LNG Project in June 2024.¹⁵ But, acting on requests for rehearing from environmental opposition, FERC decided in late November 2024 to further consider its prior analysis of the cumulative air

¹¹ *Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 4446, DOE/FE Docket No. 16-28-LNG (Oct. 16, 2019) (non-FTA authorization); DOE/FE Order No. 3866, DOE/FE Docket No. 16-28-LNG (July 21, 2016) (FTA authorization); both *amended by* DOE/FE Order Nos. 3866-A and 4446-A, DOE/FE Docket No. 16-28-LNG, (Oct. 21, 2020) (extending export term through 2050).

¹² *Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 3866-B, Docket No. 16-28-LNG (June 13, 2022).

¹³ *Venture Global Plaquemines LNG, LLC*, 190 FERC ¶ 61,113 (2025).

¹⁴ For instance, on Feb. 15, 2024, a letter from Venture Global's Chief Executive Officer to FERC requested prompt approval of the CP2 LNG project, noting that the final Environmental Impact Statement had been issued more than six months earlier, that Venture Global had already spent more than \$2 billion on the project, and that contracted offtake customers had explained to FERC the critical importance of the project. *See* Accession No. 20220215-5059 in FERC's E-library.

¹⁵ *Venture Global CP2 LNG, LLC; Venture Global CP Express, LLC*, 187 FERC ¶ 61,199 (2024).

impacts of emissions and to develop a supplemental EIS to address air issues further.¹⁶ On February 7, 2025, FERC issued a draft of the supplemental EIS that concludes, again, that the CP2 project will have no significant cumulative air quality impacts. Venture Global expects that FERC will complete this supplemental environmental review process in the coming months.

DOE authorized CP2 LNG to export up to 1,446 Bcf/yr of natural gas, equivalent to approximately 28 mtpa of LNG, to FTA countries in April 2022.¹⁷ Just yesterday, DOE issued the non-FTA authorization for CP2 LNG for those same volumes but conditioned it on a final order to follow after completion of DOE's consideration of the 2024 Study.¹⁸ Venture Global has already spent over \$4 billion to engineer and develop the CP2 LNG project and to pay its key equipment suppliers and contractors, and recently launched the FID process for the first phase of CP2 LNG. Accordingly, prompt removal of the condition imposed on CP2 LNG's export authorization to non-FTA countries is especially important.

II. Comments on the 2024 LNG Export Study

The Executive Summary of the 2024 LNG Export Study provides its "key findings" grouped in four different categories: Domestic Natural Gas Supply and Economic Impacts; Energy Security; Greenhouse Gas Emissions; and Environmental and Community Effects. Venture Global provides its comments on the 2024 Study below following this same structure.

A. Domestic Natural Gas Supply and Economic Impacts

The findings grouped in this category in the 2024 Study address several key issues that DOE has long considered as part of its evaluation of the public interest in LNG exports. All of

¹⁶ *Venture Global CP2 LNG, LLC; Venture Global CP Express, LLC*, 189 FERC ¶ 61,148 (2024). This rehearing order did make clear that, with the narrow exception of the additional consideration of air issues, its authorization of the CP2 LNG project remains in full force and effect and that the FERC remains confident in its authorization.

¹⁷ *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 4812, Docket No. 21-131-LNG (Apr. 22, 2022).

¹⁸ *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 5264, Docket No. 21-131-LNG at 7-8 (Mar. 19, 2025).

these factors as presented in the 2024 Study reinforce DOE’s long-standing conclusion that LNG exports are consistent with the public interest.

1. Gas Supplies Are Sufficient for Both LNG Exports And All Domestic Needs

First, the 2024 LNG Export Study concludes that “Across all scenarios, modeled U.S. domestic natural gas supply is sufficient to meet modeled global demand for U.S. LNG while continuing to meet domestic demand. This result holds across sensitivity scenarios on U.S. oil and gas supply.”¹⁹ Recent history, as well as all the analysis of this topic previously conducted by DOE, confirms this important conclusion, which shows that there is no domestic need for natural gas volumes proposed for export and that exports do not pose a threat to the security of domestic supply.²⁰

The tremendous growth in American natural gas production following the shale gas renaissance is well-known to DOE. In 2005, for instance, U.S. dry natural gas marketed production was just slightly more than 18 trillion cubic feet (“Tcf”); by 2011, when DOE first began issuing non-FTA authorizations for LNG exports from the lower 48 states, that production had reached about 21 Tcf. In contrast, in 2024, domestic dry gas production was approximately 37.8 Tcf, more than double the amount of the 2005 production and nearly 17 Tcf more than in 2011.²¹ Over that same period, total U.S. natural gas consumption grew from about 22 Tcf in 2005 and 24 Tcf in 2011 (requiring natural gas imports throughout that period) to 33 Tcf in

¹⁹ 2024 Study at p. S-4.

²⁰ These two related questions have consistently been among the explicitly stated focus of DOE’s public interest inquiry. *See, e.g., Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 4446 at 20; *Venture Global Calcasieu Pass, LLC*, DOE/FE Order No. 4346 at 21; *Sierra Club, et al.*, Order Denying Petition for Rulemaking on Exports of Liquefied Natural Gas, at 12 (July 18, 2023).

²¹ *See* EIA Natural Gas Data, Dry Natural Gas Production, available at: <http://www.eia.gov/dnav/ng/hist/n9070us2A.htm>. Production in 2024 was slightly down from 2023. *Id.* That result followed on numerous major producers’ decisions to reduce available production in response to low prices and lack of demand growth.

2024,²² with the result that the excess of production over consumption has grown steadily. Thus, while LNG exports have grown dramatically over that time period, natural gas production has grown by significantly larger amounts, providing ample supplies for both LNG production for exports and all other domestic needs.

Forward-looking, long-term data and projections from the Energy Information Agency (“EIA”) show that U.S. natural gas production is expected to continue increasing, as is the growing excess of production over consumption. The reference case in EIA’s 2023 Annual Energy Outlook (“AEO2023”) projects that total U.S. dry gas production will increase to 42.07 Tcf in 2050, growing by an average amount of 0.5% per year from 2022-50.²³ In contrast, AEO2023 projects natural gas consumption to decrease by an average of 0.2% per year over that time, resulting in 2050 projected consumption of 30.01 Tcf.²⁴ Thus, the AEO2023 concludes that “continued growth in U.S. production... with relatively little growth in domestic consumption, allows the U.S. to remain a net exporter of... natural gas through 2050 in all AEO2023 cases.”²⁵

DOE recognized in its most recent export authorization decisions that “AEO 2023 projects robust domestic supply conditions that are more than adequate to satisfy both domestic needs and exports of LNG.”²⁶ Similarly, in export authorization decisions issued during the previous Administration, DOE used data from AEO2022 to reaffirm its long-standing finding

²² See EIA Natural Gas Data, Total Consumption, available at: <https://www.eia.gov/dnav/ng/hist/n9140us2a.htm>.

²³ EIA, AEO2023, at Table 13 Natural Gas Supply, Disposition, and Prices (Reference Case), available at: <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=13-AEO2023&cases=ref2023&sourcekey=0>. EIA did not publish an Annual Energy Outlook in 2024.

²⁴ *Id.*

²⁵ AEO2023 at p. 6.

²⁶ See *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 5264 at 42 (Mar. 19, 2025); *Commonwealth LNG, LLC*, DOE/FECM Order No. 5238 at 43 (Feb. 14, 2025).

that domestic natural gas production is well in excess of what is required to meet projected increases in domestic consumption.²⁷ The 2024 LNG Export Study simply reinforces this well-established conclusion.

2. Any Domestic Price Impacts of LNG Exports Are Speculative and Limited

The 2024 LNG Export Study reasonably devotes significant focus to evaluation of the potential impact of growing LNG exports on domestic natural gas prices, which has always been part of DOE’s consideration of the public interest in LNG exports.²⁸ The 2024 Study observes that “there has not been a consistent relationship between domestic prices and export levels to date.”²⁹ Indeed, the historical, factual record shows that domestic natural gas prices have remained relatively low as U.S. LNG exports have increased significantly over the years. From 2015 through 2020, domestic natural gas prices were historically low as LNG exports ramped up.³⁰ For a variety of reasons, domestic prices did increase some in 2021 and more significantly in 2022 (although they were still lower than in every year from 2006 – 2008) but then fell back to very low levels in 2023 and 2024.³¹ Of course, LNG exports were increasing significantly and

²⁷ See *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 4800 at 54-55 (Mar. 16, 2022); *Cheniere Marketing LLC & Corpus Christie Liquefaction, LLC*, DOE/FE Order No. 4799 at 53 (Mar. 16, 2022); *Freeport LNG Expansion, L.P., et al.*, Order No. 4961 at 56-57 (Mar. 3, 2023).

²⁸ See, e.g., Term Extension Policy Statement, 85 Fed. Reg. 52,237 at 52,243 (Aug. 25, 2020) (“In evaluating the public interest, DOE takes seriously the potential economic impacts of higher natural gas prices. In addition to commissioning five economic studies since 2011 to examine these issues (most recently the 2018 LNG Export Study), DOE has taken into account factors that could mitigate price impacts, such as the current oversupply situation and data indicating that the natural gas industry would increase natural gas supply in response to increasing demand from the export markets.”).

²⁹ 2024 Study at p. S-4.

³⁰ See EIA, Today in Energy, “Natural gas prices in 2019 were the lowest in the past three years” (Jan. 9, 2020), available at: <https://www.eia.gov/todayinenergy/detail.php?id=42455>; EIA, Today in Energy, “In 2020, U.S. natural gas prices were the lowest in decades,” (Jan. 7, 2021), available at: <https://www.eia.gov/todayinenergy/detail.php?id=46376>.

³¹ For domestic prices over time, see EIA, Natural Gas Data, Henry Hub Natural Gas Spot Price, available at: <https://www.eia.gov/dnav/ng/hist/rngwhhdA.htm>.

consistently over this entire period,³² with no apparent effect on domestic natural gas prices. Indeed, when U.S. LNG export volumes reached record levels in 2024, “U.S. benchmark Henry Hub natural gas spot price averaged \$2.21 per million British thermal units, the lowest average annual price in inflation-adjusted dollars ever reported.”³³

In an attempt to estimate future impacts of LNG exports on domestic natural gas prices, the 2024 LNG Export Study analyzed potential changes to Henry Hub prices under various LNG export scenarios, and projected under its *Defined Policies* scenario a Henry Hub price of \$4.62 per million British thermal unit (“MMBtu”) in 2050 in 2022\$ with total LNG exports of 56.3 Bcf/d.³⁴ The Study asserts, based on its many dubious assumptions including this very bullish estimate of LNG export levels, that Henry Hub prices in 2050 would increase by 31% compared to an alternative scenario that assumes the existence of only existing and under construction LNG export projects.³⁵ For comparison, Henry Hub prices were well in excess of that projected \$4.62/MMBtu every year from 2003 to 2008.³⁶ Thus, even if natural gas prices rose to \$4.62/MMBtu in 2050, such prices were not uncommon less than 20 years ago – prior to the U.S. shale revolution. Furthermore, for comparison, EIA’s AEO 2023 Reference Case projects lower 2050 Henry Hub prices than the 2024 LNG Export Study, with prices that year estimated to be

³² For LNG export volumes over time, see EIA, Natural Gas Data, Liquefied U.S. Natural Gas Exports, available at: <https://www.eia.gov/dnav/ng/hist/n9133us2A.htm>.

³³ See EIA, Today in Energy, “Spot Henry Hub natural gas prices hit a historic low in 2024” (Jan. 8, 2025), available at: <https://www.eia.gov/todayinenergy/detail.php?id=64184>.

³⁴ 2024 LNG Export Study at p. S-4.

³⁵ *Id.*; see also *id.* at B-14.

³⁶ EIA, Natural Gas, Henry Hub Natural Gas Spot Price, available at: <https://www.eia.gov/dnav/ng/hist/rngwhhdA.htm> (ranging from an annual average of \$5.47 to \$8.86 per MMBtu between 2003 – 2008).

\$3.77/MMBtu in 2022\$ with LNG exports at 27 Bcf/d.³⁷ This projected price would be well below the anticipated price escalation solely due to standard inflation (assuming 2.50% per year).

Notably, when DOE most recently studied this same issue in depth in the 2018 LNG Export Study, it concluded that “[i]ncreasing U.S. LNG exports under any given set of assumptions about U.S. natural gas resources and their production leads to only small increases in U.S. natural gas prices.”³⁸ The 2018 Study had projected that Henry Hub prices would be \$4.70/MMBtu in 2050 in 2016\$ for the maximum modeled scenario of LNG exports of 69.1 Bcf/d,³⁹ nearly the same price as projected for 2050 in the 2024 Study. Additionally, EIA in its May 2023 report on the effects of LNG exports on domestic natural gas markets found that “[t]he resulting variation in natural gas prices in [its analysis] ... was narrower than recent in history and [in the] AEO 2023, despite a wide variety of U.S. LNG export volumes.”⁴⁰ Furthermore, DOE’s recent export authorizations considered the recent economic data and price projections and similarly concluded that “arguments concerning domestic price increases are not supported.”⁴¹ The 2024 LNG Export Study provides no basis to alter this long-standing DOE conclusion.

³⁷ EIA, AEO2023, at Table 13 Natural Gas Supply, Disposition, and Prices (Reference Case), available at: <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=13-AEO2023&cases=ref2023&sourcekey=0>.

³⁸ Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports at 55 (July 7, 2018) (hereinafter, the “2018 Study”), available at: <https://fossil.energy.gov/app/docketindex/docket/index/10>. See also “Study on Macroeconomic Outcomes of LNG Exports: Response to Comments Received on Study,” 83 Fed. Reg. 67,251 at 67,258 (Dec. 28, 2018) (“[i]ncreasing U.S. LNG exports under any given set of assumptions about U.S. natural gas resources and their production leads to only small increases in U.S. natural gas prices[.]”).

³⁹ 2018 Study at Appendix E in the “High_Ref_Low_High” scenario, available at: <https://www.energy.gov/sites/prod/files/2018/06/f52/Macroeconomic%20LNG%20Export%20Study%202018.pdf>.

⁴⁰ EIA, *AEO2023 Issues in Focus: Effects of Liquefied Natural Gas Exports on the U.S. Natural Gas Market* (May 2023), Executive Summary at 1, available at: https://www.eia.gov/outlooks/aeo/IIF_LNG/pdf/LNG_Issue_in_Focus.pdf.

⁴¹ E.g., *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 5264 at 44 (Mar. 19, 2025); *Freeport LNG Expansion, L.P., et al.*, Order No. 4961 at 62-64 (Mar. 3, 2023); *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 4800, Docket No. 19-125-LNG, at 55 (Mar. 16, 2022).

Another central finding of the 2018 Study, which is not emphasized in the 2024 Study, is that “Available natural gas resources have the largest impact on natural gas prices. Therefore, U.S. natural gas prices are far more dependent on available resources and technologies to extract available resources than on U.S. policies surrounding LNG exports.”⁴² Accordingly, public policy seeking to maintain low domestic natural gas prices should focus on facilitating natural gas production, as well as the construction of new pipeline infrastructure to transport the gas from production areas to where most needed and valued in the U.S. Any concern about domestic gas prices provides no reason to restrict LNG exports.

3. LNG Exports Provide Macro-Economic Benefits

DOE has commissioned a series of studies over the years to evaluate the macroeconomic effect of LNG exports, and all have concluded that LNG exports result in net economic benefits, a finding repeatedly recognized in DOE’s many export authorization orders. The 2018 Study explained in detail the positive correlation between LNG exports and gross domestic product (“GDP”), evaluated numerous scenarios that showed a greater gain in GDP as LNG export volumes increase, and estimating GDP in 2040 (in 2016\$) ranging from \$31.582 trillion within minimal LNG exports to \$33.159 trillion with the LNG exports of 30.7 Bcf/day.⁴³ As DOE explained in its response to comments on the 2018 Study (and subsequently repeated in numerous export authorizations), the study demonstrated that “[o]verall GDP improves as LNG exports increase for all scenarios with the same U.S. natural gas supply conditions.”⁴⁴

⁴² 2018 Study at 55.

⁴³ 2018 Study, at 67-69 and Table 11.

⁴⁴ 2018 Study Response to Comments, 83 Fed. Reg. at 67,259. For recent examples of orders reiterating and embracing this conclusion, see e.g., *Freeport LNG Expansion, L.P., et al.*, Order No. 4961 at 61 (Mar. 3, 2023); *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 4800, Docket No. 19-125-LNG, at 52 (Mar. 16, 2022).

The analysis of macro-economic effects of LNG exports in the 2024 LNG Export Study is fully consistent with this conclusion: the 2024 Study found that with increased levels of LNG exports in the *Defined Policies* scenario, U.S. GDP in 2050 would increase by \$80 billion (2022\$), and cumulatively from 2020-2050, GDP increases would total \$410 billion (2022\$).⁴⁵ Notably, and although the projected increase in U.S. GDP under the 2024 Study is indeed significant, this estimated growth in GDP from increased LNG exports is lower than projected in the 2018 Study, as well as in other recent studies. For example, the 2024 S&P LNG Study concludes that the cumulative impact of LNG exports on U.S. GDP would be nearly \$1.3 trillion (2024\$) between the period 2025-2040.⁴⁶ In any case, however, the unquestionable conclusion is that LNG exports provide America with net economic benefits.

Another very important macro-economic benefit of LNG exports – which is not addressed in the 2024 Study – is their crucial role in helping realign the U.S. balance of trade. Again, this benefit of LNG exports was highlighted in the 2018 Study, which recognized that “Increased exports of natural gas will improve the U.S. balance of trade and result in a wealth transfer into the U.S.”⁴⁷ Of course, the U.S. has experienced large international balance of trade deficits for many years, and the U.S. goods and services trade deficit in 2024 was more than \$918 billion.⁴⁸ Energy exports, including LNG exports, play an important and growing role in

⁴⁵ 2024 Study at S-5.

⁴⁶ See S&P Global, Major New US Industry at a Crossroads: a US LNG Impact Study, Phase 1, available at: <https://www.spglobal.com/en/research-insights/special-reports/major-new-us-industry-at-a-crossroads-us-lng-impact-study-phase-1>.

⁴⁷ 2018 Study at p. 64.

⁴⁸ U.S. Bureau of Economic Analysis (“BEA”) Official Blog, “U.S. International Trade in Goods and Services, December and Annual 2024” (Feb. 5, 2025), available at: <https://www.bea.gov/news/2025/us-international-trade-goods-and-services-december-and-annual-2024>.

reducing the trade deficit.⁴⁹ For instance, when the trade deficit reached \$67 billion in August 2022, LNG exports for the month were valued at \$4.95 billion, effectively reducing the deficit by about 7.5%.⁵⁰ LNG exports and their resulting contribution to reduction of the trade deficit have grown since that time,⁵¹ with the latest addition to the exports coming from the commencement of LNG exports from Plaquemines LNG. Authorizing the export of additional LNG will help redress this trade imbalance further by allowing the U.S. to export more of its abundant and valuable natural gas. In its just-issued order for CP2 LNG, DOE calculated that a project of its size exporting at peak capacity for a year could reduce the trade deficit by approximately \$9.3 billion annually assuming 2024 observed average U.S. LNG export prices.⁵²

B. Energy Security

In considering the international consequences of LNG exports in its prior orders, DOE has frequently explained that “[t]o the extent U.S. exports can diversify global LNG supplies and increase the volumes of LNG available globally, it will improve energy security for many U.S. allies and trading partners. As such...authorizing [LNG] exports may advance the public interest for reasons that are distinct from and additional to the economic benefits identified in the 2018

⁴⁹ See EIA, Today in Energy, “U.S. energy trade lowers the overall 2020 U.S. trade deficit for the first time on record” (Sept. 22, 2021), available at: <https://www.eia.gov/todayinenergy/detail.php?id=49656>.

⁵⁰ See Energy Policy Research Foundation, Chart of the Week, “LNG Trade Lowers U.S. Trade Deficit” (Sept. 27, 2023), available at: <https://eprinc.org/wp-content/uploads/2023/09/Chart2023-37-USNaturalGasTradeLowersUSTradeDeficit-Version1.pdf>; American Petroleum Institute, “Natural Gas’ Strategic Value Continues to Grow,” (Oct. 5, 2023), available at: <https://www.api.org/news-policy-and-issues/blog/2023/10/05/natural-gas-strategic-value-continues-to-grow>.

⁵¹ According to EIA data, the U.S. exported just over 300,000 Million Cubic Feet LNG in August 2022 (cited in the text above) compared to exports of over 410,000 in December 2024 (the last month reported). See EIA, Natural Gas Data, Liquefied U.S. Natural Gas Exports, available at: <https://www.eia.gov/dnav/ng/hist/n9133us2A.htm>.

⁵² *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 5264 at 44 & n.255 (Mar. 19, 2025).

LNG Export Study.”⁵³ Similarly, in its 2020 policy statement extending the term of export authorizations, DOE recognized the international consequences of its LNG export decisions and explained: “An efficient, transparent international market for natural gas with diverse sources of supply provides both economic and strategic benefits to the United States and its allies.”⁵⁴

Following Russia’s invasion of Ukraine in 2022, DOE repeatedly reiterated its recognition of the energy security benefits of LNG exports for U.S. allies and trading partners while also highlighting the concerns about energy security for Europe and Central Asia following that invasion and the ability of U.S. LNG to address those concerns.⁵⁵ Venture Global is proud to have played a key role in doing just that, as exports from Calcasieu Pass were made available to the market at that key time. In its most recent export authorization decisions, DOE recognized that that “the United States has an increasingly important role in the European Union’s (EU) gas supply,” and quoted from the EIA’s *International Energy Outlook 2023* the statement that “[i]ncreasing LNG imports from trustworthy global partners is key to fully eliminating the EU’s reliance on Russian fossil fuels.”⁵⁶ In those orders, DOE also took notice of an October 2024 report by the Institute of Energy Economics, Japan explaining the increasing demand for LNG from Japan and Southeast Asia’s emerging markets.⁵⁷

⁵³ E.g., *Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 4446 at 36; *Venture Global Calcasieu Pass, LLC*, DOE/FE Order No. 4346 at 62. Identical or very similar statements (relying on the then-current DOE/FE macroeconomic studies) are included in numerous other DOE orders.

⁵⁴ Term Extension Policy Statement, 85 Fed. Reg. 52,237 at 52,244 (Aug. 25, 2020). DOE has frequently referenced this statement in subsequent LNG export orders.

⁵⁵ *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 4800 at 55-56 (Mar. 16, 2022); *Cheniere Marketing LLC & Corpus Christie Liquefaction, LLC*, DOE/FE Order No. 4799 at 54 (Mar. 16, 2022); *Freeport LNG Expansion, L.P., et al.*, Order No. 4961 at 64-65 (Mar. 3, 2023).

⁵⁶ See *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 5264 at 46 & n.265 (Mar. 19, 2025) (citing U.S. Energy Info. Admin., *International Energy Outlook 2023* (with projections to 2050), at 45 (Oct. 11, 2023), https://www.eia.gov/outlooks/ieo/pdf/IEO2023_Narrative.pdf; *Commonwealth LNG, LLC*, DOE/FECM Order No. 5238 at 48 & n.266 (same).

⁵⁷ *Venture Global CP2 LNG, LLC*, at 47 & n.269 (citing the Institute of Energy Economics, Japan, *IEEJ 2025 Outlook* (Oct. 18, 2024), <https://enken.iecej.or.jp/data/12114.pdf>); *Commonwealth LNG*, at 48-49 & n.268 (same).

The 2024 LNG Export Study correctly recognizes that “[a]s LNG re-gasification and associated import infrastructure is built out globally, increasing U.S. LNG exports could enhance global energy security.”⁵⁸ The 2024 Study also recognizes some of the important benefits of U.S. LNG in serving world markets, explaining:

Most U.S. LNG contracts include a destination flexibility clause in which the buyer can deliver LNG to any destination, if it complies with DOE export authorizations and U.S. law. Accordingly, U.S. LNG goes to where the global market most demands it. This flexibility of gas supply can offer increased energy security for buyers who can afford to purchase gas on the spot market, particularly in times of regional energy shortages. For example, in the wake of the Russian invasion of Ukraine, U.S. LNG exports were able to supply Europe efficiently, not only due to its geographic proximity in the Atlantic Basin, but also because of its flexible supply.⁵⁹

Related portions of the 2024 Study, however, expend considerable effort in attempting to analyze where in the world demand for U.S. LNG will come from in the future.⁶⁰ Venture Global is confident of the strong international demand for U.S. LNG on a long-term basis, at least from its projects with their timing and price advantages, as evidenced by its long-term SPAs contracted for essentially all of the capacity at Calcasieu Pass and Plaquemines LNG, as well as for 9.25 mtpa of LNG sales contracted for CP2 LNG before on-site construction has even begun.

Speculation about the specific locations of future demand for LNG exports, however, is *not* a topic that should concern future DOE decisions regarding LNG export authorizations. The Policy Guidelines developed by DOE in 1984 to implement NGA Section 3 (which apply to

⁵⁸ 2024 LNG Export Study at p. S-43.

⁵⁹ *Id.* (internal footnote omitted).

⁶⁰ *See, e.g., id.* at S-44 to S-47.

exports as well as imports⁶¹) promote the free and open trade of natural gas and are designed to minimize federal control and involvement in energy markets and “to establish natural gas trade on a market-competitive basis and to provide immediate as well as long-term benefits to the American economy from this trade.”⁶² Moreover, the Guidelines provide that:

The policy cornerstone of the public interest standard [of NGA Section 3] is competition. Competitive import [export] arrangements are an essential element of the public interest, and natural gas imported [exported] under arrangements that provide for the sale of gas in volumes and at prices responsive to market demands largely meets the public interest test....⁶³

In authorizing long-term non-FTA exports, DOE has repeatedly (and as recently as yesterday) explained that it “continues to subscribe to the principle set forth in our 1984 Policy Guidelines that, under most circumstances, the market is the most efficient means of allocating natural gas supplies.”⁶⁴ DOE certainly should continue to follow this longstanding approach of allowing the market “to negotiate free of constraining governmental limits,”⁶⁵ and accordingly it should *not* engage in consideration of where LNG from a project will be exported, so long as the exports are consistent with U.S. law and policy generally, as is required in all non-FTA authorizations.

⁶¹ *E.g.*, *Philips Alaska*, DOE/FE Order No. 1473 at 14; *Yukon Pacific Corp.*, DOE/FE Order No. 350, 1 FE ¶ 70,259 at 71,128 (1989); *Sierra Club, et al.*, Order Denying Petition for Rulemaking on Exports of Liquefied Natural Gas, at 11 (July 18, 2023).

⁶² *Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas*, 49 Fed. Reg. 6,684 (Feb. 22, 1984).

⁶³ *Id.* at 6,685 and 6,687. The bracketed references to exports are added in the above quotation to reflect the Policy Guidelines’ applicability to exports.

⁶⁴ *E.g.*, *Venture Global CP2 LNG*, DOE/FE Order No. 5264 at 48 (Mar. 19, 2025) (internal footnote omitted, citing the 1984 Policy Guidelines at 49 Fed. Reg. 6684 (Feb. 22, 1984)); *see also Sierra Club, et al.*, Order Denying Petition for Rulemaking on Exports of Liquefied Natural Gas, at 11 (July 18, 2023); *Commonwealth LNG, LLC*, DOE/FECM Order No. 5238 at 49 (Feb. 14, 2025); *Dominion Cove Point LNG, LP*, Order No. 3331 at 141 (Sept. 11, 2013); *Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 4446 at 42; *Venture Global Calcasieu Pass, LLC*, DOE/FE Order No. 4346 at 69.

⁶⁵ 49 Fed. Reg. at 6687.

C. Greenhouse Gas Emissions

The 2024 LNG Export Study focuses to a great extent on issues related to greenhouse gas (“GHG”) emissions, as reflected in the titles of three of the four appendices.⁶⁶ This approach followed the central focus of the previous Administration on GHG emissions and climate change.⁶⁷ Since the issuance of the 2024 Study, however, President Trump has revoked the related Executive Orders and withdrawn from governmental policy previously issued documents focused on GHG emissions including notably the use of “social cost of carbon” calculations (which figures prominently in the 2024 Study).⁶⁸ That said, DOE has previously considered GHG issues in its LNG export proceedings, and nothing about such consideration, even as presented in the 2024 Study, undermines the conclusion that LNG exports are consistent with the public interest.

To the contrary, exporting natural gas will benefit the United States internationally by encouraging the use of more environmentally friendly natural gas for the generation of electricity as opposed to coal, diesel, or heavy fuel oil used in foreign countries. The increased use in the U.S. of natural gas for power generation in place of coal has resulted in a substantial reduction in carbon dioxide (“CO₂”) emissions. Between 2005 and 2019, for instance, total U.S. electricity generation increased by almost 2% while related CO₂ emissions fell by 33%; while some of that

⁶⁶ 2024 Study, Appendix A: Global Energy and Greenhouse Gas Implications of U.S. LNG Exports; Appendix B: Domestic Energy, Economic, and Greenhouse Gas Assessment of U.S. LNG Exports; Appendix C: Consequential Greenhouse Gas Analysis of U.S. LNG Exports.

⁶⁷ See, e.g., Executive Order 14008 of January 27, 2021, Tackling the Climate Crisis at Home and Abroad, the purpose of which was to “build[] on and reaffirm[] actions [that] Administration ha[d] already taken to place the climate crisis at the forefront of this Nation’s foreign policy and national security planning.” 86 Fed. Reg. 7619 (Feb. 1, 2021).

⁶⁸ See Executive Order, *Unleashing American Energy*, 86 Fed. Reg. 7037 (Jan. 20, 2025), available at: <https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/> (Sec. 4 (revoking various Executive Orders involving GHG and climate change policies, including Order 14008, referenced in n.63) and Sec. 6 (withdrawing various GHG-related policies)).

reduction resulted from the increased use of renewable generation, much of it has resulted from increased electric generation from environmentally superior natural gas in lieu of coal-fired generation.⁶⁹ EIA has repeatedly emphasized the key role of natural gas in reducing U.S. carbon emissions.⁷⁰

LNG exports from the U.S. may similarly offset coal, or fuel oil, usage overseas, thereby sharing the environmental benefits of natural gas with other nations in the quest to reduce global greenhouse gas emissions. For instance, the 2019 study by the International Energy Agency (“IEA”) entitled *The Role of Gas in Today’s Energy Transition* observed that “[s]ince 2010, coal-to-gas switching has saved around 500 million tonnes of CO₂ - an effect equivalent to putting an extra 200 million [electric vehicles] running on zero-carbon electricity on the road over the same period.”⁷¹ The IEA Report explained that “[w]hile there is a wide variation across different sources of coal and gas, an estimated 98% of gas consumed today has a lower lifecycle emissions intensity than coal when used for power or heat. This analysis takes into account both CO₂ and methane emissions and shows that, on average, coal-to-gas switching reduces emissions by 50% when producing electricity and by 33% when providing heat.”⁷² Furthermore, IEA

⁶⁹ EIA, “U.S. Energy-Related Carbon Dioxide Emissions,” released Sept. 30, 2020, available at: <https://www.eia.gov/environment/emissions/carbon/#:~:text=EIA%20calculated%20that%20between%202005,carbon%20generation%20totaled%205%2C475%20MMmt.&text=Between%202005%20and%202019%2C%20total.CO2%20emissions%20fell%20by%2033%25>.

⁷⁰ *Id.*; see also, e.g., EIA, Today in Energy, “Electric power sector CO₂ emissions drop as generation mix shifts from coal to natural gas” (June 9, 2021) (“Lower CO₂ emissions have largely been a result of a shift from coal to natural gas in the electricity generation mix.... Although both the increased use of renewables and the shift from coal-fired to natural gas-fired generation contributed to reductions in electric power sector CO₂ emissions, the shift from coal to natural gas had a larger effect.”), available at: <https://www.eia.gov/todayinenergy/detail.php?id=48296>; EIA, Today in Energy, “U.S. energy-related CO₂ emissions expected to rise slightly in 2018, remain flat in 2019” (Feb. 8, 2018) (“The underlying energy consumption trends that resulted in these changes—mainly because more electricity has been generated from natural gas than from other fossil fuels—have helped to lower the U.S. emissions level since 2005 because natural gas is a less carbon-intensive fuel than either coal or petroleum.”), available at: <https://www.eia.gov/todayinenergy/detail.php?id=34872>.

⁷¹ IEA, *The Role of Gas in Today’s Energy Transition*, July 2019, summary of key findings available at: <https://www.iea.org/reports/the-role-of-gas-in-todays-energy-transitions>.

⁷² *Id.*

concluded that “[t]here is potential in today’s power sector to reduce up to 1.2 gigatonnes of CO2 emissions by switching from coal to existing gas-fired plants.”⁷³

DOE first prepared a study of GHG issues in 2014 to better inform the public about the environmental effects of increased LNG exports. The 2014 GHG Study compared the GHG emissions from power generation in Europe and Asia using exported U.S. LNG with the GHG emissions from power generated using local hydrocarbon resources.⁷⁴ DOE has repeatedly held that “[t]he conclusions of the [2014 GHG Study], combined with the observation that many LNG-importing nations rely heavily on fossil fuels for electric generation, suggests that exports of U.S. LNG may decrease global GHG emissions, although there is substantial uncertainty on this point....Based on the record evidence, however, we see no reason to conclude that U.S. LNG exports will increase global GHG emissions in a material or predictable way.”⁷⁵

In 2019, DOE announced the availability for public review and comment of a new report updating the 2014 GHG Study.⁷⁶ As with the 2014 GHG Study, the update compared life cycle GHG emissions from U.S. LNG exports to regional coal⁷⁷ and other imported natural gas for

⁷³ *Id.*

⁷⁴ DOE, DOE/NETL-2014/1649, *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States* (May 14, 2014) (hereinafter, the “2014 GHG Study”), available at: <http://www.energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf>.

⁷⁵ *E.g.*, *Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 4446 at 41; *Venture Global Calcasieu Pass, LLC*, DOE/FE Order No. 4346 at 69. Identical or very similar statements are included in numerous other DOE orders.

⁷⁶ DOE/NETL-2019/2041, *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States: 2019 Update* (Sept. 12, 2019) (the “2019 GHG Study”).

⁷⁷ The 2014 and 2019 GHG Studies assumed that all coal-fired power plants would use regionally sourced coal. Thus, the LCA did not include any GHG emissions associated with the ocean transport of coal. This assumption represents the most conservative coal profile. In fact, the U.S. Energy Information Administration reported that in 2023, the United States exported about 100 million short tons of coal to at least 71 countries. About 51% of total coal exported in 2023 was metallurgical coal and 49% was steam coal (for power production). See U.S. Energy Information Administration, Coal Frequently Asked Questions (FAQs) webpage, available at: <https://www.eia.gov/tools/faqs/faq.php?id=66&t=2>. Because the 2014 and 2019 GHG Studies did not include GHG emissions associated with the ocean or other than local regional transport of coal, the GHG lifecycle emissions

electric power generation in Europe and Asia, while including more recent information. In its 2020 Term Extension Policy Statement, DOE concluded that the 2019 GHG Study supports the issuance of export authorizations, and explained that “[b]y importing LNG from the United States, [certain] countries will have access to a more reliable, cost-effective supply of energy that also has emissions benefits over current sources.”⁷⁸ During the Biden Administration, DOE repeatedly recognized that the “[lifecycle analysis (“LCA”)] GHG Update [2019] demonstrated that the conclusions of the 2014 LCA GHG Report remained the same” and that the 2019 GHG Study, consistent with the studies before it, “supports the proposition that exports of LNG from the lower-48 states will not be inconsistent with the public interest.”⁷⁹

The 2024 LNG Export Study employed a different, more speculative methodology than used in DOE’s 2014 and 2019 GHG studies.⁸⁰ The 2024 Study included a “consequential” LCA

from coal are understated and the US LNG-supplied scenarios are even more favorable than the conclusions of those studies indicate.

⁷⁸ 85 Fed. Reg. 52,237, 52,245 (Aug. 25, 2020).

⁷⁹ See *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 4800 at 21 (Mar. 16, 2022); *Cheniere Marketing LLC & Corpus Christie Liquefaction, LLC*, DOE/FE Order No. 4799 at 21 (Mar. 16, 2022); *Freeport LNG Expansion, L.P., et al.*, Order No. 4961 at 21 (Mar. 3, 2023).

⁸⁰ In January 2024, DOE issued a temporary pause on the review of pending applications to export LNG, explaining that the pause was necessary because “[t]he most recent economic and environmental analyses were published in 2018 and 2019, respectively....” DOE, *The Temporary Pause on Review of Pending Applications to Export Liquefied Natural Gas*, https://www.energy.gov/sites/default/files/2024-02/The%20Temporary%20Pause%20on%20Review%20of%20Pending%20Applications%20to%20Export%20Liquefied%20Natural%20Gas_0.pdf. Despite this claim that the underlying analyses had not been updated since 2018 and 2019, according to media reports, “just four months earlier, the Department of Energy had completed a study of the issue, concluding that ramped-up LNG exports would only modestly increase domestic residential gas prices and wouldn’t appreciably change global greenhouse gas emissions.” Bloomberg, *Biden LNG Study Shelved After Pollution Impacts Deemed Minor*, <https://www.bloomberg.com/news/articles/2025-03-19/shelved-biden-study-found-pollution-impact-of-lng-exports-minor?srnd=undefined>. Bloomberg also reported that

the initial, unreleased Energy Department study offered a different picture of the role of LNG exports, providing evidence that could even be used to justify more license approvals. For instance, where the second assessment was described as concluding that unfettered LNG exports would increase wholesale domestic natural gas prices by more than 30%, the first, unreleased analysis showed that residential prices did not exceed 4% in all modeled scenarios. In another case, Biden’s energy secretary described the second study as showing that more LNG exports “would lead to increases in global net emissions” across every studied scenario. However, the earlier 2023 analysis that was shelved found that in multiple scenarios, global greenhouse gas emissions would decline if US LNG exports climbed.

that “enables an examination of how the availability of U.S. LNG could affect global energy consumption, what types of energy U.S. LNG might displace, and the resulting global greenhouse gas implications.”⁸¹ In contrast, the 2014 and 2019 GHG studies used “attributional” LCAs that “estimate direct emissions associated with the use of natural gas, LNG, or other fuels used to generate electricity...and compare the potential environmental profiles of alternatives.”⁸² An attributional analysis does not attempt to account for supply or demand shifts.

Notably, when responding to comments on its 2019 GHG Study, DOE explained why it conducted an attributional analysis, rather than a consequential analysis:

the LCA GHG Update (like the 2014 Report) does not provide information on whether authorizing exports of U.S. LNG to non-FTA nations will increase or decrease GHG emissions on a global scale. Recognizing there is a global market for LNG, exports of U.S. LNG will affect the global price of LNG which, in turn, will affect energy systems in numerous countries. DOE further acknowledges that regional coal and imported natural gas are not the only fuels with which U.S.-exported LNG will compete. U.S. LNG exports may also compete with renewable energy, nuclear energy, petroleum-based liquid fuels, coal imported from outside East Asia or Western Europe, indigenous natural gas, synthetic natural gas derived from coal, and other resources. However, to model the effect that U.S. LNG exports would have on net global GHG emissions would require projections of how each of these fuel sources would be affected in each LNG-importing nation. Such an analysis would not only have to consider market dynamics in each of these countries over the coming decades, but also the interventions of numerous foreign governments in those markets. Moreover, the uncertainty associated with estimating each of these factors would likely render such an analysis too speculative to inform the public interest determination in DOE’s non-FTA proceedings.⁸³

Id. Therefore, in addition to the comments provided herein, Venture Global recommends that DOE consider whether to include portions of or concepts in the 2023 Study that may have been improperly reworked or in some cases omitted from the 2024 Study.

⁸¹ 2024 Study at S-6.

⁸² *Id.* at S-6-7.

⁸³ Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update—Response to Comments, 85 Fed. Reg. 72, 81 (Jan. 2, 2020).

Venture Global agrees with this more realistic view regarding the ability to accurately model complex world energy markets over the coming decades, and submits that the “consequential” LCA provided in the 2024 Study is too speculative and too susceptible to questionable assumptions to be of any reliable use in future non-FTA authorization decisions.

Turning nevertheless briefly to the GHG-related conclusions from the “consequential” LCA analysis in the 2024 Study, the summary findings highlight the conclusion that increasing U.S. LNG exports from 23.7 Bcf/d to 56.3 Bcf/d in 2050 would result in an additional 711 million metric tons of carbon dioxide equivalent cumulative global GHG emissions, an increase of just 0.05%, along with an additional 0.08% increase in cumulative global services (*i.e.*, those products of the global economy that provide services to customers).⁸⁴ In other words, increased availability of economically competitive U.S. LNG will help grow the global economy (greater levels of global services demand) which, in turn, will result in a net but relatively smaller increase in GHG emissions. In the relevant Appendix, the 2024 Study explains that “when excluding increases in global services, U.S. LNG substitutions for other energy services results in a net decrease in GHG intensity. In other words, U.S. LNG substitution in foreign markets results in lower global GHG emissions when accounting for all changes in energy services.”⁸⁵ Taking this analysis further, the 2024 Study shows that when global services are held constant relative to the reference case, the consequential GHG intensity of increasing U.S. LNG is net beneficial (*i.e.*, reduces cumulative GHG emissions from 2020-50) in 10 out of 12 scenarios modeled, including in the key “Defined Policies: Model Resolved” scenario.⁸⁶ In other words, in nearly all the scenarios, U.S. LNG exports are projected to reduce net GHG emissions relative

⁸⁴ 2024 Study at S-6 & n.9.

⁸⁵ Appendix C of the 2024 Study, at page C-40 (emphasis added).

⁸⁶ *See id.*, Appendix C, at page C-41 & Table 34.

to the reference case due to market substitution of LNG for alternative fuels with higher GHG emissions.

In simple terms, then, the GHG analysis in the 2024 Study projects that global economic growth and energy demand will drive net global GHG emissions higher while at the same time clearly recognizing that increased consumption of U.S. LNG exports will reduce the global GHG emissions that would have occurred absent the American LNG. Even putting aside concerns about the speculative nature of the consequential LCA analysis, and questions about its underlying assumptions, nothing in that analysis could support any reasonable conclusion that LNG exports are not consistent with the public interest.

D. Environmental and Community Effects

The final portion of the 2024 LNG Export Study (its Appendix D) focuses on the benefits and potential impacts to the general public from the production, transportation, liquefaction, and export of natural gas, based essentially on a literature review. Some benefits noted include employment opportunities, increased local tax revenues, and royalty payments to mineral rights holders. Potential impacts noted include environmental impacts to air, water, and land resources, among others.⁸⁷

Much of the relevant discussion in this area of the 2024 Study seems outside the relevant factors to be considered by DOE in its non-FTA export decision-making. For example, to the extent required under the National Environmental Policy Act (“NEPA”), DOE typically considers the environmental effects of its decision by acting as a cooperating agency in the NEPA process led by FERC (for projects, such as proposed land-based LNG export terminals, where FERC is the lead federal agency) and relies on FERC’s NEPA documentation to support

⁸⁷ See *id.* at p. S-8.

DOE's own decision-making. As part of the NEPA process, all of the potential impacts on local communities are fully considered during the multi-year process involving numerous opportunities for public input and comment. Issues related to the impacts of natural gas production and transportation, however, are beyond the scope of DOE's NEPA review of LNG exports. Since the beginning of its decisions regarding non-FTA export authorizations, DOE has consistently held that indirect effects of upstream gas production are not "reasonably foreseeable" effects of DOE decision-making and this conclusion has been upheld by the D.C. Circuit.⁸⁸ Furthermore, natural gas production and transportation are subject to a wide range of Federal and State environmental regulations and policies; it is emphatically not DOE's role or duty to try to regulate in those areas indirectly.

III. Conclusion

Wherefore, for all the foregoing reasons, Venture Global asks DOE to consider its comments along with the agency's consideration of the 2024 LNG Export Study. Moving forward, DOE should conclude that the 2024 Study in no way shows or even suggests that LNG exports "will not be consistent with the public interest." Therefore, the 2024 Study should in no way alter DOE's long-standing conclusion that LNG exports to non-FTA nations are consistent with the public interest and should be authorized.

⁸⁸ See *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189 (D.C. Cir. 2017); *Sierra Club v. U.S. Dep't of Energy*, Nos. 16-1186, 16-1252, 16-1253, 703 Fed. Appx. 1 (D.C. Cir. Nov. 1, 2017).

Respectfully submitted,

/s/ J. Patrick Nevins

J. Patrick Nevins
Latham & Watkins LLP
555 Eleventh Street, N.W.
Suite 1000
Washington, D.C. 20004
Telephone: (202) 637-3363
Patrick.Nevins@lw.com

Sandra Y. Snyder
Associate General Counsel
Venture Global LNG, Inc.
1001 19th Street North
Suite 1500
Arlington, VA 22209
Telephone: (202) 920-0919
ssnyder@venturegloballng.com

Counsel to Venture Global LNG, Inc.

Dated: March 20, 2025