

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT

_____)	
PORT ARTHUR LNG PHASE II, LLC)	DOCKET NO. 20-23-LNG
_____)	

ORDER GRANTING LONG-TERM AUTHORIZATION
TO EXPORT LIQUEFIED NATURAL GAS
TO NON-FREE TRADE AGREEMENT NATIONS

DOE/FECM ORDER NO. 5292

MAY 29, 2025

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FREQUENTLY USED ACRONYMS

AEO	Annual Energy Outlook
Bcf/d	Billion Cubic Feet per Day
Bcf/yr	Billion Cubic Feet per Year
DOE	U.S. Department of Energy
EIA	U.S. Energy Information Administration
EIS	Environmental Impact Statement
FE	Office of Fossil Energy (prior to July 4, 2021)
FECM	Office of Fossil Energy and Carbon Management
FERC	Federal Energy Regulatory Commission
FTA	Free Trade Agreement
GDP	Gross Domestic Product
ICF	ICF International, Inc.
LCA	Life Cycle Analysis
GHG	Greenhouse Gas
LNG	Liquefied Natural Gas
mtpa	Million Metric Tons per Annum
NEMS	National Energy Modeling System
NEPA	National Environmental Policy Act
NGA	Natural Gas Act
PALNG Phase II	Port Arthur LNG Phase II, LLC
Tcf	Trillion Cubic Feet

I. INTRODUCTION

On February 28, 2020, Port Arthur LNG Phase II, LLC (PALNG Phase II) filed an application (Application)¹ with the Department of Energy's (DOE) Office of Fossil Energy and Carbon Management (FECM) (then the Office of Fossil Energy)² under section 3 of the Natural Gas Act (NGA).³ PALNG Phase II submitted an amendment to the Application (Amendment) on March 3, 2020.⁴

PALNG Phase II requests long-term, multi-contract authorization to export domestically produced liquefied natural gas (LNG) in a volume up to 13.5 million metric tons per annum (mtpa), which it states is equivalent to 698 billion cubic feet per year (Bcf/yr) of natural gas, or 1.91 Bcf per day (Bcf/d).⁵ PALNG Phase II seeks authorization to export this LNG by vessel from Trains 3 and 4 (the Expansion Project), which will be located within the proposed Port Arthur LNG terminal (the Base Project) in Jefferson County, Texas.⁶ PALNG Phase II's affiliate Port Arthur LNG, LLC (Port Arthur LNG) is developing the Base Project, which will consist of two liquefaction trains (Trains 1 and 2) previously approved for exports of LNG totaling 698 Bcf/yr of natural gas to both FTA and non-FTA countries on a non-additive basis under DOE/FE

¹ Port Arthur LNG Phase II, LLC, Application for Long-Term, Multi-Contract Authorizations to Export Liquefied Natural Gas From the United States to Free Trade Agreement and Non-Free Trade Agreement Nations, Docket No. 20-23-LNG (Feb. 28, 2020) [hereinafter PALNG Phase II App.].

² The Office of Fossil Energy changed its name to the Office of Fossil Energy and Carbon Management on July 4, 2021.

³ 15 U.S.C. § 717b. The authority to regulate the imports and exports of natural gas, including liquefied natural gas, under section 3 of the NGA has been delegated to the Assistant Secretary for FECM in Redelegation Order No. S4-DEL-FE1-2023, issued on April 10, 2023.

⁴ Port Arthur LNG Phase II, LLC, Amendment to Application, Docket No. 20-23-LNG (Mar. 3, 2020) [hereinafter Amendment to App.] (clarifying the name of a corporate affiliate).

⁵ PALNG Phase II App. at 3.

⁶ *Id.* at 3-4; *see also id.* at 10.

Order Nos. 3698⁷ and 4372,⁸ as amended, respectively.⁹

PALNG Phase II requests authorization to export this LNG to any country with the capacity to import LNG and with which trade is not prohibited by U.S. law or policy.¹⁰ This includes: (i) any country with which the United States has entered into a free trade agreement (FTA) requiring national treatment for trade in natural gas, and with which trade is not prohibited by U.S. law or policy (FTA countries), under NGA section 3(c);¹¹ and (ii) any other country with which trade is not prohibited by U.S. law or policy (non-FTA countries), under NGA section 3(a).¹² PALNG Phase II seeks these authorizations for a term ending “on the later of the date that is twenty years from the date of the commencement of the term or December 31, 2050.”¹³ On July 14, 2020, in Order No. 4562, DOE granted the FTA portion of the Application in the

⁷ *Port Arthur LNG, LLC*, DOE/FE Order No. 3698, Docket No. 15-53-LNG, Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Proposed Port Arthur LNG Project in Port Arthur, Texas, to Free Trade Agreement Nations (Aug. 20, 2015), *amended by* DOE/FE Order No. 3698-A (Nov. 20, 2018) (increasing export volume and amending start date of FTA export term), *further amended by* DOE/FE Order No. 3698-B (Oct. 28, 2020) (extending export term); DOE/FECM Order No. 3698-C (Apr. 21, 2023) (extending start date of FTA export term and non-FTA export commencement deadline). Although Order No. 3698 was issued in Docket No. 15-53-LNG, the amendments to Order No. 3698 were docketed in both Docket Nos. 15-53-LNG and 18-162-LNG.

⁸ *Port Arthur LNG, LLC*, DOE/FE Order No. 4372, Docket No. 15-96-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (May 2, 2019), *amended by* DOE/FE Order No. 4372-A (Oct. 28, 2020) (extending export term), *further amended by* DOE/FECM Order No. 4372-B (Apr. 21, 2023) (extending start date of FTA export term and non-FTA export commencement deadline).

⁹ *See infra* § II.E (FERC Proceeding) & Appendix.

¹⁰ PALNG Phase II App. at 3; *see also id.* at 10.

¹¹ 15 U.S.C. § 717b(c). The United States currently has FTAs requiring national treatment for trade in natural gas with Australia, Bahrain, Canada, Chile, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, Republic of Korea, and Singapore. FTAs with Israel and Costa Rica do not require national treatment for trade in natural gas.

¹² *Id.* § 717b(a); *see* PALNG Phase II App. at 3.

¹³ PALNG Phase II App. at 4. *See also* U.S. Dep’t of Energy, Extending Natural Gas Export Authorizations to Non-Free Trade Agreement Countries Through the Year 2050; Notice of Final Policy Statement and Response to Comments, 85 Fed. Reg. 52,237 (Aug. 25, 2020) [hereinafter 2050 Policy Statement]. Additionally, DOE notes that, effective January 12, 2021, long-term export authorizations contain authority to export the same approved volume of LNG pursuant to transactions with terms of less than two years, including commissioning volumes, on a non-additive basis. *See* U.S. Dep’t of Energy, Including Short-Term Export Authority in Long-Term Authorizations for the Export of Natural Gas on a Non-Additive Basis; Policy Statement, 86 Fed. Reg. 2243 (Jan. 12, 2021).

volume of 698 Bcf/yr of natural gas for the requested term.¹⁴

PALNG Phase II requests that the non-FTA authorization commence on the earlier of the date of first export from the Expansion Project or seven years from the date of the requested authorization.¹⁵ Additionally, PALNG Phase II seeks to export this LNG on its own behalf and as agent for other entities that hold title to the LNG at the time of export.¹⁶

On March 30, 2020, DOE published a notice of the non-FTA portion of the Application, as amended, in the *Federal Register* (Notice of Application).¹⁷ The Notice of Application called on interested persons to submit protests, motions to intervene, notices of intervention, and written comments by April 29, 2020.¹⁸ No protests or motions to intervene in opposition to the Application were timely filed, and the Application is therefore uncontested.¹⁹ On November 26, 2024, however, Sierra Club filed a “Motion to Intervene and Protest Out of Time” (or Late-Filed Pleading).²⁰ PALNG Phase II filed an “Answer in Opposition to Motion to Intervene and Protest Out of Time of Sierra Club” on December 11, 2024.²¹ For the reasons discussed below, DOE denies Sierra Club’s Late-Filed Pleading.²²

¹⁴ See *Port Arthur LNG Phase II, LLC*, DOE/FE Order No. 4562, Docket No. 20-23-LNG, Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Free Trade Agreement Nations (July 14, 2020).

¹⁵ PALNG Phase II App. at 4.

¹⁶ *Id.*

¹⁷ U.S. Dep’t of Energy, *Port Arthur LNG Phase II, LLC; Application for Long-Term, Multi-Contract Authorization To Export Liquefied Natural Gas to Non-Free Trade Agreement Nations*, Notice of Application, 85 Fed. Reg. 17,568 (Mar. 30, 2020) [hereinafter Notice of App.].

¹⁸ DOE finds that the requirement for public notice of applications in 10 C.F.R. Part 590 is applicable only to non-FTA applications under NGA section 3(a).

¹⁹ See 10 C.F.R. § 590.102(b).

²⁰ Sierra Club, Motion to Intervene and Protest Out of Time, Docket No. 20-23-LNG (Nov. 26, 2024) [hereinafter Sierra Club Late-Filed Pleading].

²¹ *Port Arthur LNG Phase II, LLC*, Answer in Opposition to Motion to Intervene and Protest Out of Time of Sierra Club, Docket No. 20-23-LNG (Dec. 11, 2024) [hereinafter PALNG Phase II Answer]. Additionally, on February 7, 2025, PALNG Phase II filed a motion asking DOE to “expeditiously issue” a procedural order dismissing Sierra Club’s Late-Filed Pleading. *Port Arthur LNG Phase II, LLC, Request for Procedural Order Regarding Late-Filed Motion to Intervene and Protest of Sierra Club*, Docket No. 20-23-LNG (Feb. 7, 2025). That motion was denied by operation of law when DOE did not take action on the motion within 30 days after it was filed. See 10 C.F.R. § 590.302(c).

²² See *infra* § VIII.A.

DOE has reviewed the non-FTA portion of the uncontested Application, DOE's 2024 LNG Export Study (or the 2024 Study),²³ the public comments received on the 2024 Study, DOE's Response to Comments on the 2024 Study,²⁴ and other evidence discussed below. On the basis of this substantial administrative record, and taking into account the considerations directed by Executive Order (E.O.) 14154, *Unleashing American Energy*,²⁵ DOE has determined that it has not been shown that PALNG Phase II's proposed exports will be inconsistent with the public interest, as would be required to deny the Application under NGA section 3(a).

Specifically, DOE finds that PALNG Phase II's non-FTA exports are likely to yield economic benefits to the United States, diversify global LNG supplies, and improve energy security for U.S. allies and trading partners over the course of the export term. DOE further finds that granting the requested authorization is unlikely to adversely affect the availability of natural gas supplies to domestic consumers or result in natural gas price increases to the extent that they would negate the economic benefits to the United States.

Concurrently with this Order, DOE is issuing a categorical exclusion from the preparation of an environmental impact statement or environmental assessment under the National

²³ U.S. Dep't of Energy, Office of Fossil Energy & Carbon Management, *Energy, Economic, & Environmental Assessment of U.S. LNG Exports* (Dec. 2024), <https://fossil.energy.gov/app/docketindex/docket/index/30> [hereinafter 2024 LNG Export Study or 2024 Study] (providing links to summary report and appendices); *see also infra* § III (DOE's 2024 LNG Export Study).

²⁴ U.S. Dep't of Energy, Office of Fossil Energy & Carbon Management, *Energy, Economic, and Environmental Assessment of U.S. LNG Exports: Response to Comments* (May 19, 2025), https://www.energy.gov/sites/default/files/2025-05/2024%20LNG%20Export%20Study_Response%20to%20Comments_Final_05.19.2025.pdf [hereinafter Response to Comments]. DOE published a Notice of Availability of the Response to Comments on May 22, 2025. *See* U.S. Dep't of Energy, Notice of Availability of Response to Comments for 2024 LNG Export Study: Energy, Economic, and Environmental Assessment of U.S. LNG Exports, 90 Fed. Reg. 21,912 (May 22, 2025).

²⁵ Exec. Order No. 14154 of January 20, 2025, *Unleashing American Energy*, 90 Fed. Reg. 8353, 8357 (Jan. 29, 2025), <https://www.govinfo.gov/content/pkg/FR-2025-01-29/pdf/2025-01956.pdf> [hereinafter E.O. 14154] (directing the Secretary of Energy to "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 [non-FTA] application"); *see infra* § II.D.

Environmental Policy Act of 1969 (NEPA)²⁶ for the Application (Categorical Exclusion).

Specifically, DOE is applying categorical exclusion B5.7, *Export of natural gas and associated transportation by marine vessel*.²⁷ This Order grants the non-FTA portion of the Application on the basis of this Categorical Exclusion.

In sum, DOE grants the non-FTA portion of the Application in the full volume requested—698 Bcf/yr of natural gas, or 1.91 Bcf/d—through December 31, 2050, and subject to the Terms and Conditions and Ordering Paragraphs set forth herein. Because the export volumes authorized in PALNG Phase II’s FTA order (DOE/FE Order No. 4562) and this Order both reflect the planned liquefaction capacity of the Expansion Project as approved by FERC,²⁸ the FTA and non-FTA volumes are not additive. However, the grant of this Order brings the total authorized export volume from Trains 1-4 of the Port Arthur LNG terminal (*i.e.*, the Base and Expansion Projects) to 1,396 Bcf/yr of natural gas to both FTA and non-FTA countries on a non-additive basis.²⁹

Additionally, this Order brings DOE’s cumulative total of approved non-FTA exports of LNG from the lower-48 states to 52.75 Bcf/d of natural gas (across two conditional orders and 40 final orders, including this final Order).³⁰

²⁶ 42 U.S.C. § 4321 *et seq.*

²⁷ See 10 C.F.R. Part 1021, Subpt. D, App. B, Categorical Exclusion B5.7; *see also* U.S. Dep’t of Energy, National Environmental Policy Act Implementing Procedures, Final Rule, 85 Fed. Reg. 78,197 (Dec. 4, 2020); *see infra* § II.C.

²⁸ *See infra* § II.E (FERC Proceeding).

²⁹ *See infra* § X.G (Combined FTA and Non-FTA Export Authorizations) & Appendix.

³⁰ Final non-FTA orders that were vacated or that expired are not included in this total volume. *See infra* § VIII.D (identifying long-term orders vacated and expired to date). Additionally, DOE has issued one final long-term order authorizing exports of LNG produced from sources from a proposed facility to be constructed in Alaska to non-FTA countries. *See Alaska LNG Project LLC*, DOE/FE Order No. 3643-A, Docket No. 14-96-LNG, Final Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Aug. 20, 2020) (as subsequently amended in DOE/FECM Order No. 3643-C); *see also Sierra Club v. U.S. Dep’t of Energy*, 134 F.4th 568 (D.C. Cir. 2025) (denying petition for review of Alaska LNG order). The Alaska LNG volume (2.55 Bcf/d) is not included in the volumes discussed in this Order, which generally involve the export of LNG produced from the lower-48 states. Because there is no natural gas pipeline interconnection between Alaska and the lower-48 states, DOE generally views those LNG export markets as distinct.

II. BACKGROUND

A. DOE's Prior Economic and Environmental Studies

Previously, DOE has relied on the following economic and environmental studies to inform its review of applications to export LNG to non-FTA countries under NGA section 3(a):

- DOE's economic study referred to as the 2018 LNG Export Study—the fifth economic study conducted by DOE for use in LNG export decisions—which assessed the effects of varying levels of LNG exports from the lower-48 states to non-FTA countries for the time period 2020-2050;³¹
- DOE's environmental study referred to as the Addendum,³² which was developed in 2014 to inform DOE's public interest evaluation on potential environmental impacts of unconventional natural gas exploration and production activities, including hydraulic fracturing; and
- DOE's environmental studies referred to as the 2014 Life Cycle Greenhouse Gas Report (or the LCA GHG Report)³³ and the 2019 LCA GHG Update (or the 2019 Update),³⁴ which calculated the life cycle greenhouse gas (GHG) emissions for LNG exported from the United States.

As explained below, DOE commenced the 2024 LNG Export Study proceeding to provide an updated understanding of the potential effects of U.S. LNG exports on both economic and environmental considerations.³⁵

³¹ See U.S. Dep't of Energy, Study on Macroeconomic Outcomes of LNG Exports; Notice of Availability of the 2018 LNG Export Study and Request for Comments, 83 Fed. Reg. 27,314 (June 12, 2018); U.S. Dep't of Energy, Study on Macroeconomic Outcomes of LNG Exports; Response to Comments Received on Study, 83 Fed. Reg. 67,251 (Dec. 28, 2018). Prior to the 2018 Study, DOE had relied on economic studies evaluating LNG exports conducted in 2011, 2012, 2014, and 2015. See *id.* at 67,254-55.

³² See U.S. Dep't of Energy, Addendum to Environmental Review Documents Concerning Exports of Natural Gas From the United States, 79 Fed. Reg. 48,132 (Aug. 15, 2014); see also <https://www.energy.gov/fecm/addendum-environmental-review-documents-concerning-exports-natural-gas-united-states> (related documents).

³³ See U.S. Dep't of Energy, Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States, 79 Fed. Reg. 32,260 (June 4, 2014). DOE announced the availability of this report on its website on May 29, 2014. "LCA" refers to the life cycle analysis (LCA) model used in DOE's greenhouse gas (GHG) analyses.

³⁴ See, e.g., Nat'l Energy Tech. Lab., *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States: 2019 Update* (DOE/NETL-2019/2041) (Sept. 12, 2019), <https://www.energy.gov/sites/prod/files/2019/09/f66/2019%20NETL%20LCA-GHG%20Report.pdf>; U.S. Dep't of Energy, Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States; Notice of Availability of Report Entitled Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update and Request for Comments, 84 Fed. Reg. 49,278 (Sept. 19, 2019).

³⁵ See *infra* § III.

B. Judicial Decisions Upholding DOE's Non-FTA Authorizations

In 2015 and 2016, Sierra Club petitioned the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) for review of five long-term LNG export authorizations issued by DOE. The D.C. Circuit denied four of the five petitions for review: one in a published decision issued in August 2017 (*Sierra Club I*),³⁶ and three in a consolidated, unpublished opinion issued in November 2017 (*Sierra Club II*).³⁷ Sierra Club withdrew its fifth and remaining petition for review.³⁸

In *Sierra Club I*, the D.C. Circuit concluded that DOE had complied with both NGA section 3(a) and NEPA in issuing the challenged non-FTA authorization to Freeport LNG Expansion, L.P. and its related entities (collectively, Freeport). DOE had granted the Freeport application, finding that Freeport's proposed exports were in the public interest under NGA section 3(a). DOE also considered and disclosed the potential environmental impacts of its decision under NEPA. Sierra Club petitioned for review of the Freeport authorization, arguing that DOE fell short of its obligations under both the NGA and NEPA. The D.C. Circuit rejected Sierra Club's arguments in a unanimous decision, holding that, "Sierra Club has given us no reason to question the Department's judgment that the [Freeport] application is not inconsistent with the public interest."³⁹

Subsequently, in the consolidated *Sierra Club II* opinion, the D.C. Circuit ruled that

³⁶ *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189 (D.C. Cir. 2017) [hereinafter *Sierra Club I*] (denying petition for review of the LNG export authorization issued to Freeport LNG Expansion, L.P., *et al.*).

³⁷ *Sierra Club v. U.S. Dep't of Energy*, 703 Fed. App'x 1 (D.C. Cir. 2017) [hereinafter *Sierra Club II*] (denying petitions for review in Nos. 16-1186, 16-1252, and 16-1253 of the LNG export authorizations issued to Dominion Cove Point LNG, LP; Sabine Pass Liquefaction, LLC; and Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC, respectively).

³⁸ *See Sierra Club v. U.S. Dep't of Energy*, No. 16-1426, Per Curiam Order (D.C. Cir. 2018) (granting Sierra Club's unopposed motion for voluntary dismissal).

³⁹ *Sierra Club I*, 867 F.3d at 203 (observing that, for its public interest review, DOE "considered various factors such as domestic economic effects (*e.g.*, job creation and tax revenue ...) and foreign policy goals (*e.g.*, global fuel diversification and energy security for our foreign trading partners ...), in addition to the environmental impacts it examined through the NEPA process").

“[t]he court’s decision in [*Sierra Club I*] largely governs the resolution of the [three] instant cases.”⁴⁰ Upon its review of the remaining “narrow issues” in those cases, the Court again rejected Sierra Club’s arguments under the NGA and NEPA, and upheld DOE’s actions in issuing the non-FTA authorizations in those proceedings.⁴¹

The D.C. Circuit’s decisions in *Sierra Club I* and *II* continue to guide DOE’s review of applications to export LNG to non-FTA countries.⁴²

C. DOE’s Categorical Exclusion and Marine Transport Technical Support Document

In 2020, DOE revised its NEPA procedures that provide for a categorical exclusion if neither an environmental impact statement (EIS) nor an EA is required—specifically, by promulgating a revised categorical exclusion B5.7, *Export of natural gas and associated transportation by marine vessel* (B5.7 categorical exclusion).⁴³ In the accompanying final rule, DOE explained that the revision to the B5.7 categorical exclusion was intended to “focus exclusively on the analysis of potential environmental impacts resulting from activities occurring at or after the point of export, which are within the scope of DOE’s export authorization authority under the NGA.”⁴⁴ DOE further explained that “[s]uch impacts begin at the point of export and are limited to the marine transport effects.”⁴⁵

⁴⁰ *Sierra Club II*, 703 Fed. App’x at *2.

⁴¹ *Id.* For a more detailed discussion of *Sierra Club I* and *Sierra Club II*, see *Freeport LNG Expansion, L.P., et al.*, DOE/FECM Order No. 4961, Docket No. 21-98-LNG, Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, at 21-24 (Mar. 3, 2023).

⁴² *See, e.g., id.* at 24.

⁴³ *See* U.S. Dep’t of Energy, National Environmental Policy Act Implementing Procedures, Final Rule, 85 Fed. Reg. 78,197 (Dec. 4, 2020) [hereinafter NEPA Implementing Procedures]; *see also* 10 C.F.R. Part 1021, Subpt. D, App. B, Categorical Exclusion B5.7.

⁴⁴ NEPA Implementing Procedures, 85 Fed. Reg. at 78,197; *see also id.* at n.8 (stating that “[t]his scope of analysis is consistent with decisions in recent years of the [D.C. Circuit], which recognize that DOE ‘maintains exclusive jurisdiction over the export of natural gas as a commodity.’”) (quoting *Sierra Club v. Fed. Energy Regul. Comm’n*, 827 F.3d 36, 40 (D.C. Cir. 2016)); *id.* at 78,203 (explaining that “DOE lacks the statutory authority to authorize construction and operation of export facilities,” and therefore “DOE need not review environmental impacts associated with those authorizations.”).

⁴⁵ *Id.* at 78,197; *see also id.* at n.9 (“DOE defines export activities as starting at the point of delivery to the export vessel, and extending to the territorial waters of the receiving country.”).

On the basis of data referenced in the accompanying Technical Support Document,⁴⁶ DOE concluded that “the transport of natural gas by marine vessels adhering to applicable maritime safety regulations and established shipping methods and safety standards normally does not pose the potential for significant environmental impacts.”⁴⁷

D. Executive Order Issued on January 20, 2025

E.O. 14154, issued on January 20, 2025, directed the Secretary of Energy to “restart reviews of applications for approvals of [LNG] export projects as expeditiously as possible, consistent with applicable law.”⁴⁸ DOE complied with this directive with its issuance of non-FTA export authorizations beginning in February 2025.⁴⁹ Additionally, E.O. 14154 states that, “[i]n assessing the ‘Public Interest’ to be advanced by any particular application” to export LNG under NGA section 3(a), 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.”⁵⁰ This Order likewise complies with that directive.

E. FERC Proceeding

On April 18, 2019, FERC issued an order authorizing the siting, construction, and operation of Trains 1 and 2 of the Port Arthur LNG terminal (the Base Project), proposed by

⁴⁶ See *id.* at 78,198 n.16 (citing U.S. Dep’t of Energy, Technical Support Document, Notice of Final Rulemaking, National Environmental Policy Act Implementing Procedures (10 C.F.R. Part 1021) (Nov. 2020), <https://www.energy.gov/sites/prod/files/2021/01/f82/technical-support-document-10-cfr-1021-2020-11.pdf>).

⁴⁷ *Id.* at 78,200 (reiterating that “[i]mpacts beyond marine transport are beyond the scope of DOE’s NEPA review.”); see also *id.* at 78,202.

⁴⁸ E.O. 14154, *supra* note 25, 90 Fed. Reg. at 8357 (§ 8(a)). Because DOE has jurisdiction to regulate exports of LNG under NGA section 3(a) (not approvals of export projects, which are under FERC’s jurisdiction), DOE interprets E.O. 14154 as directing DOE to review non-FTA export applications “as expeditiously as possible.”

⁴⁹ See, e.g., *Commonwealth LNG, LLC*, DOE/FECM Order No. 5238, Docket No. 19-134-LNG, Order Conditionally Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, at 7 (Feb. 14, 2025).

⁵⁰ E.O. 14154, 90 Fed. Reg. at 8357 (§ 8(a)).

PALNG Phase II's affiliate, Port Arthur LNG.⁵¹ The Base Project is authorized to have a total production capacity of approximately 13.5 mtpa of LNG, equivalent to approximately 698 Bcf/yr of natural gas.⁵²

On February 19, 2020, PALNG Phase II and its affiliate PALNG Common Facilities Company, LLC filed an application with FERC under NGA section 3 for authorization to site, construct, and operate the Expansion Project with the same total production capacity as the Base Project (approximately 13.5 mtpa of LNG, equivalent to approximately 698 Bcf/yr of natural gas).⁵³ On September 21, 2023, FERC issued an order approving the Expansion Project, and subsequently modified the order, in part, on rehearing.⁵⁴

Thus, as approved by FERC, the LNG production capacity at the Port Arthur LNG terminal (*i.e.*, the Base and Expansion Projects) will total 27 mtpa of LNG, equivalent to approximately 1,396 Bcf/yr of natural gas.⁵⁵

III. DOE'S 2024 LNG EXPORT STUDY

A. Background

The 2024 LNG Export Study was conducted as a comprehensive update of DOE's macroeconomic and environmental studies and aimed to capture the recent and complex dynamics of the LNG export market. It differed from DOE's prior economic and environmental studies (discussed *supra* § II.A) in certain areas. For example, the economic study did not focus

⁵¹ *Port Arthur LNG, LLC, et al.*, FERC Docket Nos. CP17-20-000, *et al.*, Order Granting Authorizations Under Sections 3 and 7 of the Natural Gas Act, 167 FERC ¶ 61,052 (2019); *see also* PALNG Phase II App. at 6. In the same order, FERC authorized Port Arthur LNG's affiliate, Port Arthur Pipeline, LLC, to construct and operate two natural gas pipelines.

⁵² *See* PALNG Phase II App. at 6.

⁵³ *Id.* at 4, 6-7.

⁵⁴ *Port Arthur LNG Phase II, LLC & PALNG Common Facilities Co., LLC*, Order Granting Authorization Under Section 3 of the Natural Gas Act, 184 FERC ¶ 61,184 [hereinafter FERC Order], *order on reh'g*, 185 FERC ¶ 61,194 (2023) (addressing arguments raised on rehearing and modifying and setting aside order, in part).

⁵⁵ PALNG Phase II App. at 10 n.21.

explicitly on varying levels of exports but rather expanded its analysis to consider different policy scenarios and technology availability.⁵⁶ The LCA was updated from a comparison of life cycle GHG emissions from U.S. LNG exports to regional coal and other imported natural gas for electric power generation in Europe and Asia to a consequential LCA that estimated the direct and indirect market effects of additional U.S. LNG exports to better understand their effect on global GHG emissions.⁵⁷ Finally, the environmental addendum expanded the number of topics it considered, to include effects on communities from activities associated with natural gas production and transportation, and effects on U.S. communities from natural gas exports from LNG facilities.⁵⁸

The 2024 Study is composed of a summary report and four appendices that provide more detail on the key elements within the Study.

First, *Appendix A: Global Energy and Greenhouse Gas Implications of U.S. LNG Exports* (Appendix A) presented an analysis of the global market demand for U.S. LNG exports across a range of scenarios and the global emissions impacts of increased U.S. LNG exports through 2050. This analysis used the Global Change Analysis Model (GCAM), which is an integrated multisector model of global energy, economy, agriculture, land use, water, and climate systems. DOE's Pacific Northwest National Laboratory (PNNL) conducted the principal modeling work in Appendix A.⁵⁹

⁵⁶ See *Energy, Economic, and Environmental Assessment of U.S. LNG Exports, Appendix A: Global Energy and Greenhouse Gas Implications of U.S. LNG Exports*, at A-2 – A-3 (Dec. 2024) [hereinafter 2024 Study Appendix A].

⁵⁷ A consequential LCA enables examination of how the availability of U.S. LNG could affect global energy consumptions, what types of energy U.S. LNG might displace, and the resulting global GHG implications. See Study Summary Report at S-6.

⁵⁸ See *id.* at S-47.

⁵⁹ See U.S. Dep't of Energy, *2024 LNG Export Study: Energy, Economic, and Environmental Assessment of U.S. LNG Exports*; Notice of Availability and Request for Comments, at 4 (Dec. 17, 2024), https://www.energy.gov/sites/default/files/2024-12/2024%20LNG%20Export%20Study%20FRN_signed_Study%20Statement%20Added%2012172024.pdf. [hereinafter 2024 Study Notice].

Second, *Appendix B: Domestic Energy, Economic, and Greenhouse Gas Assessment of U.S. LNG Exports* (Appendix B) presented an analysis of the implications of the various U.S. LNG export levels on the U.S. economy and greenhouse gas (GHG) emissions. The analysis in Appendix B was conducted using an updated and adapted version of the U.S. Energy Information Administration's (EIA) National Energy Modeling System (NEMS) and Industrial Economics, Inc.'s (IEc) Household Energy Impact Distribution Model (HEIDM). OnLocation, Inc. and IEc performed the principal modeling work in Appendix B.⁶⁰

Third, *Appendix C: Consequential Greenhouse Gas Analysis of U.S. LNG Exports* (Appendix C) presented an analysis of global GHG emissions in response to increased U.S. LNG Exports. The Appendix describes a potential approach for considering consequential market effects in the project application review process with respect to GHG emissions. DOE's National Energy Technology Laboratory (NETL) used the natural gas systems LCA model it developed and maintains to perform the principal modeling work in Appendix C.⁶¹

Finally, *Appendix D: Addendum on Environmental and Community Effects of U.S. LNG Exports* (Appendix D) is a literature review of the effects of upstream, midstream, and downstream natural gas production and exports on the environment and on local communities. This appendix summarizes key findings from scientific literature, as well as publications from industry and non-governmental organizations. Staff in DOE headquarters, with support from NETL, prepared the summary information in Appendix D.⁶²

⁶⁰ *Id.* at 4-5.

⁶¹ *Id.* at 5.

⁶² *Id.*

B. Methodology

For each scenario in Appendices A through C of the 2024 Study, GCAM was used to estimate the global demand for U.S. LNG exports and global GHG emissions impacts.⁶³ Then, these projections of the global demand for U.S. LNG for key scenarios were put into NEMS and HEIDM to evaluate domestic impacts, including changes in natural gas prices and consumption across economic sections, changes in carbon dioxide (CO₂) emissions, and changes in energy prices experienced by American households.⁶⁴ Finally, projections of global demand for U.S. LNG and global GHG emissions from GCAM were used in a consequential life cycle GHG analysis of U.S. LNG exports.⁶⁵

Appendix D, a literature review, was developed by reviewing publicly available scientific research across the physical and social sciences on the effects of natural gas production, transportation, and exports on the environment and local communities.⁶⁶ This material was supplemented by publicly available non-governmental and industry materials, as well as by news articles.⁶⁷

C. Scenarios and Key Assumptions

Appendices A through C of the 2024 Study evaluated scenarios that analyzed a combination of the following assumptions: policy, technology availability, and U.S. LNG export level.⁶⁸ The Study contained three categories of policy assumptions: *Defined Policies*, *Commitments*, and *Net Zero 2050*.⁶⁹ The *Defined Policies* scenario included an explicit representation of domestic policies in place at the time, including the Inflation Reduction Act of

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ 2024 Study Notice at 5.

⁶⁶ See Study Summary Report at S-47.

⁶⁷ *Id.*

⁶⁸ See *id.* at S-15.

⁶⁹ *Id.*

2022 and Infrastructure Investment and Jobs Act signed into law in 2021.⁷⁰ The *Commitments* scenario assumed that all global regions meet stated climate commitments as made during the 26th Conference of the Parties to the United Nations Framework on Climate Change held in Glasgow, Scotland, United Kingdom in 2021.⁷¹ The *Net Zero 2050* scenario assumed that all global regions meet net-zero carbon dioxide (CO₂) emissions by 2050.⁷²

For technology availability, there were two categories of assumptions: *High CCS* and *Moderate CCS*.⁷³ *High CCS* assumed higher deployment of CCS technologies to meet decarbonization policy assumptions.⁷⁴ *Moderate CCS* limited CCS and assumed higher deployment of renewable energy to meet climate commitments.⁷⁵

Lastly, within each scenario of policy and technology assumptions, three assumptions of U.S. LNG exports levels were considered: *Existing/FID Exports*, *Model Resolved Exports*, and *High Exports*.⁷⁶ *Existing/FID Exports* assumed U.S. LNG exports were held at levels equivalent to 90% of the LNG capacity that was operational or had export authorizations from DOE and reached FID as of December 2023 (23.7 Bcf/d).⁷⁷ *Model Resolved Exports* assumed U.S. LNG exports estimated at a trajectory determined by the model.⁷⁸ Finally, *High Exports* assumed U.S. LNG exports increased incrementally above *Model Resolved* levels starting in 2035 to reach 20 Bcf/d above *Model Resolved* levels in 2050.⁷⁹

⁷⁰ *Id.* at S-16.

⁷¹ *Id.*

⁷² Study Summary Report at S-16.

⁷³ The level of CCS deployment in 2050 under these assumptions is higher than the current literature on CCS predicts because 1) GCAM represents an expanded set of CCS applications in power generation, 2) all three policy scenarios include a representation of the IRA which incentivizes the deployment of CCS, and 3) policies enacted outside of the U.S. resolved for further deployment of CCS. *See id.* at S-17.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.* at S-18

⁷⁷ *Id.*

⁷⁸ Study Summary Report at S-18.

⁷⁹ *Id.*

Alongside the above, the 2024 Study explored three additional assumptions related to the economic competitiveness of U.S. natural gas: *High U.S. Supply*, *Low U.S. Supply*, and *High Middle East Supply*.⁸⁰

Using a combination of the aforementioned assumptions (*i.e.*, global climate policy, technology availability, and U.S. LNG export levels), Appendices A and C evaluated 14 primary scenarios, as well as six additional sensitivity scenarios on economic competitiveness.⁸¹ Appendix B's analysis included six scenarios spanning a range of U.S. LNG export levels.⁸² However, the analysis only used the levels of LNG exports derived under the global *Defined Policies* assumptions found in Appendix A, while varying the size of U.S. natural oil and gas supply and technological improvements in natural gas extraction.⁸³ Appendix D, as a literature review, contained no assumptions.

D. DOE Proceeding

On December 17, 2024, DOE published the notice of availability of the 2024 LNG Export Study on its website.⁸⁴ The Notice of Availability was published in the *Federal Register* on December 20, 2024.⁸⁵ The Notice of Availability informed the public that DOE intended to use the 2024 LNG Export Study to inform its public interest review in pending and future non-FTA applications, invited submission of comments regarding the use of the 2024 Study, and entered the 2024 Study into the administrative record of the 14 pending non-FTA export proceedings identified in the caption of the Notice of Availability.⁸⁶

⁸⁰ *Id.* at S-19.

⁸¹ *See id.*

⁸² *Id.* at S-20.

⁸³ *Id.*

⁸⁴ *See* 2024 Study Notice, *supra* note 59.

⁸⁵ U.S. Dep't of Energy, *2024 LNG Export Study: Energy, Economic, and Environmental Assessment of U.S. LNG Exports*; Notice of Availability and Request for Comments, 89 Fed. Reg. 104,132 (Dec. 20, 2024).

⁸⁶ *See id.*

DOE initially invited public comment on the 2024 Study for 60 days, but extended the comment period for an additional 30 days.⁸⁷ In total, the comment period began on December 20, 2024, and extended through March 20, 2025.⁸⁸ DOE received more than 100,000 comments on the 2024 Study from a variety of sources, including participants in the natural gas industry, industrial users, environmental organizations, think-tanks, academics, and individuals.⁸⁹

DOE summarized and responded to these comments in a document entitled *Energy, Economic, and Environmental Assessment of U.S. LNG Exports: Response to Comments* (Response to Comments), published on DOE’s website on May 19, 2025.⁹⁰ On May 22, 2025, DOE published the Notice of Availability of the Response to Comments in the *Federal Register*.⁹¹

DOE incorporates into the record of this proceeding the 2024 LNG Export Study, the Notice of Availability of the 2024 Study, the public comments received, the Response to Comments, and the Notice of Availability of the Response to Comments—which together constitute the 2024 LNG Export Study proceeding.

E. DOE’s Findings and Conclusions from the 2024 LNG Export Study Proceeding

1. Key Findings

Upon consideration of the material reviewed (*i.e.*, the 2024 Study, comments, and materials submitted in support of comments), DOE made the following key findings in the Response to Comments on the 2024 Study:

⁸⁷ See U.S. Dep’t of Energy, 2024 LNG Export Study: Energy, Economic, and Environmental Assessment of U.S. LNG Exports; Extension of Comment Period, 90 Fed. Reg. 9018 (Feb. 5, 2025).

⁸⁸ *Id.*

⁸⁹ The public comments are posted on the 2024 LNG Export Study webpage at <https://fossil.energy.gov/app/docketindex/docket/index/30>.

⁹⁰ See Response to Comments, *supra* note 24.

⁹¹ See Notice of Availability of Response to Comments, *supra* note 24.

1. U.S domestic natural gas supply is sufficient to meet domestic and market-based global demand for U.S. natural gas (including LNG).
2. Increasing U.S. LNG exports increases U.S. GDP.
3. Higher levels of U.S. LNG exports will have a beneficial impact on the U.S. trade balance.
4. Increased LNG exports are projected to have relatively modest impacts on prices and there has not been a consistent effect of U.S. LNG exports on prices to date. The potential price impacts from increased LNG exports modeled in the 2024 Study are within the range of prices observed over the past five years, and those price impacts are below the price increases from U.S. LNG exports modeled in the 2018 LNG Export Study.
5. Increased U.S. LNG exports would enhance national and energy security for the United States, as well as U.S. allies and trading partners.
6. If U.S. LNG exports more than triple from current levels and reach the model-resolved level of exports, 56.3 Bcf/d, the cumulative increase in global GHG emissions to 2050 would be no greater than 0.1%. Given the uncertainties inherent in modeling the global energy system, DOE cannot conclude that the change in GHG emissions would be significantly different from zero.
7. Increased U.S. exports of LNG are more likely to displace other sources of natural gas, along with coal and oil, than to replace renewable energy.
8. Natural gas production and the development of natural gas export infrastructure provide economic support to the communities in which they occur, including increased levels of employment.
9. Natural gas production, processing, and transportation have environmental effects.

Federal, state, and local regulatory requirements, which are outside DOE’s authority over LNG exports, include measures to reduce or mitigate any potential related impacts.⁹²

DOE determined that the public comments received on the 2024 LNG Export Study “either support or do not provide a sufficient basis to invalidate or undermine these findings.”⁹³

2. Conclusions

DOE conducted the 2024 LNG Export Study to identify and assess potential effects of continued expansion of U.S. LNG exports to non-FTA countries. Based upon the record in the 2024 LNG Export Study proceeding, DOE determined in the Response to Comments that the 2024 Study provides support for additional exports of U.S. LNG to non-FTA countries.⁹⁴ A primary conclusion of the 2024 LNG Export Study—which DOE affirmed in the Response to Comments—is that “domestic natural gas supply is sufficient to meet both domestic demand and the modeled global demand for U.S. LNG in all scenarios, including sensitivity scenarios on U.S. oil and gas supply.”⁹⁵

DOE further concluded that the export of LNG generates net economic benefits for the United States, including increasing GDP in all cases; has a beneficial impact on the U.S. trade balance; enhances energy security for the United States and its allies and trading partners; and displaces more or equally GHG emissions-intensive fuels globally.⁹⁶ For example, DOE found that the destination flexibility of its FTA and non-FTA authorizations—in which a buyer can

⁹² Response to Comments at 47.

⁹³ *Id.*

⁹⁴ *See, e.g., id.* at 46-50.

⁹⁵ *Id.* at 47; *see also id.* at 43 (observing that “market forces work to match supply and demand, such that enough natural gas would be produced to satisfy U.S. demand regardless of export levels, given the very large American resource base”).

⁹⁶ *Id.* at 46-49.

deliver LNG to any destination not prohibited by law or policy—enhances global energy security, regardless of the destination region.⁹⁷

DOE also determined that LNG export levels to date have not demonstrated a “consistent effect” on domestic natural gas prices, but that “any domestic price impact is expected to be minimal due to the abundant U.S. supply of natural gas.”⁹⁸ As some commenters noted, and DOE agreed, “natural gas supply curves used in modeling show the ability to add significant supply with only small changes in prices.”⁹⁹

DOE also concluded that these economic and energy security benefits may be achieved with only a minimal impact to cumulative global GHG emissions. Specifically, “across all supply assumptions, higher LNG export levels increase energy-related cumulative global GHG emissions for the entire modeled period of 2020 to 2050 no more than one-tenth of one percent (0.1%).”¹⁰⁰ DOE thus determined that, “considering the uncertainty in the underlying estimates and the time period evaluated,” “there could be no change or even a reduction in emission based on a number of possible outcomes (*e.g.*, increased coal displacement).”¹⁰¹ In other words, given the uncertainties inherent in modeling the global energy system, “DOE cannot conclude that the change in GHG emissions would be significantly different from zero,” and thus the GHG emissions discussed in the Study “are not expected to affect DOE’s public interest determination in pending or future non-FTA authorizations.”¹⁰²

⁹⁷ *Id.* at 48; *see also id.* at 40 (stating that DOE “agrees that LNG exports from the United States contribute to global energy security” due to the destination flexibility of its export authorizations).

⁹⁸ Response to Comments at 48; *see also id.* at 17 (stating that the “many simultaneous changes that have occurred in natural gas production and markets in recent years ... make it challenging to parse out [the] separate effects” of U.S. export levels on domestic prices of natural gas).

⁹⁹ *Id.* at 47.

¹⁰⁰ *Id.* at 49 (emphasis added).

¹⁰¹ *Id.*

¹⁰² *Id.* (stating that “DOE cannot conclude that global emissions would necessarily increase.”).

Regarding the key findings from Appendix D, DOE noted that natural gas production, processing, and transportation results in positive and negative impacts to the communities in which it occurs.¹⁰³ Specifically, the 2024 Study found that, although natural gas production, processing, and transportation “have environmental effects,” benefits from additional natural gas production include job opportunities, increased tax revenues for local governments, and royalties for landowners.¹⁰⁴ DOE further observed that its “regulatory jurisdiction is limited, extending only to the act of exportation.”¹⁰⁵ However, DOE agreed with commenters noting that other federal, state, and local agencies have jurisdiction over health, environmental, and associated safety impacts discussed in Appendix D. DOE concluded that these federal, state, and local regulators “are in the best position to balance the benefits and challenges associated with natural gas production, pipeline transportation, and liquefaction.”¹⁰⁶ DOE reaffirmed that a denial of requested non-FTA exports under NGA section 3(a) based on the environmental impacts associated with natural gas production “would be too blunt an instrument to address the concerns raised in Appendix D.”¹⁰⁷

DOE also stated that it continues to endorse the principle set forth in its 1984 Policy Guidelines¹⁰⁸ that the market is generally the most efficient means of allocating natural gas supplies. Specifically, DOE observed that market forces ultimately determine the success of any

¹⁰³ *Id.*; see also 2024 LNG Export Study at S-8.

¹⁰⁴ Response to Comments at 47, 49.

¹⁰⁵ *Id.* at 45.

¹⁰⁶ *Id.*; see also *id.* at 49.

¹⁰⁷ *Id.* at 50. DOE also noted that its discussion of certain impacts to local communities in Appendix D, such as environmental justice factors, was based on direction in executive orders that have since been revoked. Consistent with executive orders issued since the publication of the 2024 Study, DOE stated that it will not consider these factors in reviewing non-FTA export applications under NGA section 3(a). See *id.* (citing executive orders).

¹⁰⁸ U.S. Dep’t of Energy, New Policy Guidelines and Delegations Order Relating to Regulation of Imported Natural Gas, 49 Fed. Reg. 6684 (Feb. 22, 1984) [hereinafter 1984 Policy Guidelines].

particular LNG export project and, in turn, the “market-derived level of U.S. LNG exports.”¹⁰⁹

DOE noted that technological innovations and industry investment are “two factors that influence market demand” for exports of U.S. LNG.¹¹⁰

For all of these reasons, DOE concluded that the 2024 LNG Export Study and the public comments received “support the proposition that exports of LNG from the United States will not be inconsistent with the public interest.”¹¹¹ DOE stated that, in non-FTA export proceedings going forward, DOE will consider each application as required under the NGA and NEPA based on the administrative record compiled in each proceeding, which now includes the 2024 Study proceeding.¹¹²

IV. PUBLIC INTEREST STANDARD

Section 3(a) of the NGA sets forth the standard of review for the non-FTA portion of the Application:

[N]o person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the [Secretary of Energy]¹¹³ authorizing it to do so. The [Secretary] shall issue such order upon application, unless after opportunity for hearing, [the Secretary] finds that the proposed exportation or importation will not be consistent with the public interest. The [Secretary] may by [the Secretary’s] order grant such application, in whole or in part, with such modification and upon such terms and conditions as the [Secretary] may find necessary or appropriate.¹¹⁴

¹⁰⁹ See Response to Comments at 8-9 (noting that an authorization to export LNG “does not guarantee that any particular project will succeed”); see also *id.* at 42 (discussing market forces and changing market conditions).

¹¹⁰ *Id.* at 50.

¹¹¹ *Id.*

¹¹² *Id.*; see also *id.* at 4.

¹¹³ The Secretary’s authority was established by section 301(b) of the Department of Energy Organization Act, 42 U.S.C. § 7151(b), which transferred jurisdiction over import and export authorizations from the Federal Power Commission to the Secretary of Energy; see also *id.* § 7172(f) (section 402(f)).

¹¹⁴ 15 U.S.C. § 717b(a).

DOE, as affirmed by the U.S. Court of Appeals for the District of Columbia Circuit, has consistently interpreted NGA section 3(a) as creating a rebuttable presumption that a proposed export of natural gas is in the public interest.¹¹⁵ Accordingly, DOE will conduct an informal adjudication and grant a non-FTA application unless DOE finds that the proposed exportation will not be consistent with the public interest.¹¹⁶

NGA section 3(a) does not define “public interest” or identify criteria that must be considered in evaluating the public interest. In evaluating an export application under this standard, DOE applies the principles described in DOE’s 1984 Policy Guidelines and other matters found to be appropriate to make a determination of the public interest, such as the domestic need for the natural gas to be exported.¹¹⁷ The goals of the 1984 Policy Guidelines are to minimize federal control and involvement in energy markets and to promote a balanced and mixed energy resource system.¹¹⁸ While the 1984 Policy Guidelines explicitly discuss only natural gas imports, in 1999 DOE held in Order No. 1473 that the same Policy Guidelines should be applied to natural gas export applications.¹¹⁹

¹¹⁵ See *Sierra Club I*, 867 F.3d at 203 (“We have construed [NGA section 3(a)] as containing a ‘general presumption favoring [export] authorization.’”) (quoting *W. Va. Pub. Serv. Comm’n v. U.S. Dep’t of Energy*, 681 F.2d 847, 856 (D.C. Cir. 1982)).

¹¹⁶ See *id.* (“there must be ‘an affirmative showing of inconsistency with the public interest’ to deny the application” under NGA section 3(a)) (quoting *Panhandle Producers & Royalty Owners Ass’n v. Econ. Regul. Admin.*, 822 F.2d 1105, 1111 (D.C. Cir. 1987)). As of August 24, 2018, qualifying small-scale exports of natural gas to non-FTA countries are deemed to be consistent with the public interest under NGA section 3(a). See 10 C.F.R. §§ 590.102(p), 590.208(a).

¹¹⁷ See, e.g., U.S. Dep’t of Energy, Order Denying Petition for Rulemaking on Exports of Liquefied Natural Gas, at 10-12 (July 18, 2023), <https://www.energy.gov/sites/default/files/2023-07/DOE%20Response%20to%20Sierra%20Club%27s%20Petition%20for%20Rulemaking%207.18.2023%20%2802%29.pdf> [hereinafter DOE Order Denying Petition for Rulemaking] (discussing the development of DOE’s regulatory framework for evaluating non-FTA export applications).

¹¹⁸ 1984 Policy Guidelines, 49 Fed. Reg. at 6685 (stating that “[t]he market, not government, should determine the price and other contract terms of imported [or exported] natural gas,” and emphasizing the importance of “minimizing regulatory impediments to a freely operating market”).

¹¹⁹ *Phillips Alaska Natural Gas Corp., et al.*, DOE/FE Order No. 1473, Docket No. 96-99-LNG, Order Extending Authorization to Export Liquefied Natural Gas from Alaska (Apr. 2, 1999), at 14 (citing *Yukon Pac. Corp.*, DOE/FE Order No. 350, Order Granting Authorization to Export Liquefied Natural Gas From Alaska, 1 FE ¶ 70,259, at p. 71,128 (1989)).

Thus, DOE’s review of non-FTA applications focuses on: (i) the domestic need for the LNG proposed to be exported, (ii) whether the proposed exports pose a threat to the security of domestic natural gas supplies, (iii) whether the arrangement is consistent with DOE’s policy of promoting market competition, and (iv) any other factors bearing on the public interest as determined by DOE—which, to date, have included a variety of economic, international, and environmental considerations.¹²⁰ To conduct this review, DOE looks to record evidence developed in the application proceeding.¹²¹ Before reaching a final decision, DOE must also comply with NEPA.¹²²

V. DESCRIPTION OF REQUEST

As relevant here, PALNG Phase II is requesting long-term, multi-contract authorization to export LNG in a volume equivalent to 698 Bcf/yr of natural gas from the Expansion Project (Trains 3 and 4) to non-FTA countries.¹²³ Additional information is set forth below.

A. Description of Applicant

PALNG Phase II is a Delaware limited liability company with its principal place of business in Houston, Texas. PALNG Phase II states that it is a wholly-owned, indirect subsidiary of Sempra Energy, a California corporation with its principal place of business in San Diego, California.¹²⁴

Since the time the Application was filed in February 2020, PALNG Phase II (together with other entities that are affiliates of Sempra Energy) has filed two statements with DOE providing notice of a change in control with respect to its upstream ownership—on April 30,

¹²⁰ See DOE Order Denying Petition for Rulemaking at 10-12.

¹²¹ See *id.* at 12.

¹²² See *supra* § I.

¹²³ PALNG Phase II App. at 1; see also *supra* § I.

¹²⁴ PALNG Phase II App. at 5-6; see also *id.* at Appendix C (Organizational Chart as of Feb. 13, 2020).

2021,¹²⁵ and on February 22, 2022,¹²⁶ respectively, pursuant to DOE’s Change in Control Procedures.¹²⁷ DOE approved each of those changes in control.¹²⁸

Currently, Port Arthur LNG Phase II, LLC is wholly owned by Sempra LNG Holding, LP, which in turn is wholly owned by Sempra Global Holdings, LP, which in turn is wholly owned by Sempra Infrastructure Partners, LP (SI Partners). SI Partners is 70% owned by Sempra Energy; 20% owned by KKR Pinnacle Investor, L.P., a subsidiary of KKR & Co. Inc.; and 10% owned by Black Silverback ZC 2022 LP, a wholly owned indirect subsidiary of the Abu Dhabi Investment Authority.¹²⁹

B. Proposed Expansion Project

As proposed by PALNG Phase II and approved by FERC, the Expansion Project will be located on an approximately 900-acre project site within a 2,842-acre parcel of land located near the City of Port Arthur, in Jefferson County, Texas.¹³⁰ The site is owned in fee by an affiliate of Port Arthur LNG, PALNG Common Facilities Company, LLC (PALNG Common Facilities).¹³¹ PALNG Phase II states that it intends to lease or purchase the project site from PALNG Common Facilities.¹³²

¹²⁵ See *Cameron LNG, LLC, et al.*, Statement of Change in Control, Docket Nos. 11-145-LNG, *et al.* (Apr. 30, 2021) (as subsequently supplemented).

¹²⁶ See *Cameron LNG, LLC, et al.*, Statement of Change in Control, Docket Nos. 11-145-LNG, *et al.* (Feb. 22, 2022).

¹²⁷ U.S. Dep’t of Energy, Procedures for Changes in Control Affecting Applications and Authorizations to Import or Export Natural Gas, 79 Fed. Reg. 65,541 (Nov. 5, 2014) [hereinafter DOE Change in Control Procedures].

¹²⁸ See DOE Response to Statement of Change in Control, Docket Nos. 11-145-LNG, *et al.* (June 29, 2021), <https://www.energy.gov/sites/default/files/2021-07/Sempra%20CIC%20Response%20Letter.pdf>; *Cameron LNG LLC, et al.*, DOE/FECM Order No. 4815, Docket Nos. 11-145-LNG, *et al.*, Order Approving Change in Control (May 3, 2022), <https://www.energy.gov/sites/default/files/2022-05/Sempra%20CIC%20Order4815.pdf> [hereinafter 2022 Statement of Change in Control].

¹²⁹ See *Cameron LNG LLC, et al.*, DOE/FECM Order No. 4815, at 4-5; *see also* 2022 Statement of Change in Control, at 4-5 & Appendix B (Post-Transactional Organizational Structure).

¹³⁰ PALNG Phase II App. at 5, 10; *see also id.* at 4 (stating that the Expansion Project “will be located entirely within the LNG export terminal (the ‘Base Project’)”); FERC Order, *supra* note 54, at PP 3-4.

¹³¹ Amendment to App. (amending the name of the entity referenced in the Application (at 5-6) to PALNG Common Facilities, and stating that PALNG Common Facilities is a wholly-owned, indirect subsidiary of Sempra Energy).

¹³² PALNG Phase II App. at 6; Amendment to App.

PALNG Phase II states that the Expansion Project will consist of two liquefaction trains—Train 3 and 4—each capable of producing 6.73 mtpa of LNG, or approximately 13.5 mtpa in the aggregate.¹³³ Each train will consist of a feed gas pre-treatment unit, a heavy hydrocarbon removal unit, and a natural gas liquefaction unit. PALNG Phase II asserts that the Expansion Project will not include any new marine facilities or LNG storage tank, as LNG produced from Trains 3 and 4 will be stored and exported using storage tanks and marine facilities approved as part of the Base Project.¹³⁴

C. Pipelines and Source of Supply

PALNG Phase II states that the Expansion Project will have access to the natural gas produced in the United States and transported on the “extensive U.S. interstate and intrastate natural gas pipeline grid.”¹³⁵ PALNG Phase II further states that natural gas will be delivered to the Expansion Project by pipeline facilities to be owned and operated by its affiliate Port Arthur Pipeline, LLC.¹³⁶ Specifically, “the natural gas for the Expansion Project will be received from the previously authorized Port Arthur Texas Connector Pipeline,” and “will be liquefied and stored in full-containment storage tanks awaiting LNG carriers for export.”¹³⁷

D. Business Model

PALNG Phase II requests this authorization on its own behalf and as agent for other entities that will hold title to the LNG at the time of export.¹³⁸ PALNG Phase II states that, to date, it has not yet entered into long-term natural gas supply or export contracts for the requested

¹³³ *Id.*

¹³⁴ *Id.* (stating that the Expansion Project likewise will not require a change in the size or quantity of LNG ships currently authorized for the Base Project); *see also* FERC Order at P 4.

¹³⁵ PALNG Phase II App. at 11; *see also id.* at 11-13.

¹³⁶ *Id.* at 11; *see also id.* at 11 n.23 (stating that Port Arthur Pipeline, LLC is a wholly-owned indirect subsidiary of Sempra Energy, and describing the pipeline facilities that will deliver natural gas to both the Base and Expansion Projects).

¹³⁷ FERC Order at P 5.

¹³⁸ PALNG Phase II App. at 4, 8-9.

exports. According to PALNG Phase II, it anticipates that it will sell LNG to customers on a Free On Board (FOB) basis at the terminal under LNG sales and purchase agreements, but it is in discussions with customers regarding other proposed structures (such as liquefaction tolling agreements).¹³⁹ PALNG Phase II further states that it will file all long-term, binding contracts associated with the export of LNG from the Expansion Project, once executed, in accordance with established policy and precedent, and will comply with all DOE requirements for exporters and agents, including registration requirements.¹⁴⁰

VI. APPLICANT’S PUBLIC INTEREST ANALYSIS

A. Overview

PALNG Phase II states that NGA section 3(a) creates a presumption that its proposed non-FTA exports are in the public interest, which opponents bear the burden of overcoming.¹⁴¹ In support of its position, PALNG Phase II addresses the following factors: (i) domestic natural gas supply and demand; (ii) the economic impacts of the proposed exports, including regional benefits and effects on domestic natural gas prices; (iii) geopolitical benefits and international trade, and (iv) environmental benefits.

B. Domestic Natural Gas Supply and Demand

PALNG Phase II asserts that its Application comes in the context “of the rapid growth in U.S. natural gas resources and production.”¹⁴² According to PALNG Phase II, “[i]n light of the substantial addition of resources and the comparatively minor increases in domestic natural gas demand, there are more than sufficient natural gas resources to accommodate both domestic demand and the exports proposed in this Application throughout the term of the requested

¹³⁹ *Id.* at 15.

¹⁴⁰ *Id.* at 9, 15; *see also* Port Arthur LNG Phase II, LLC, Semi-Annual Report, Docket No. 20-23-LNG (Apr. 1, 2025) (providing commercial and project updates).

¹⁴¹ PALNG Phase II App. at 17.

¹⁴² *Id.* at 19.

authorization.”¹⁴³ PALNG Phase II further contends that prices for natural gas in the U.S. market are now “significantly below those of most other major gas-consuming countries” and thus “domestic gas can be exported, liquefied, and re-exported to foreign markets on a competitive basis” while having “only a nominal effect on U.S. prices.”¹⁴⁴

PALNG Phase II highlights the significant increases in U.S. natural gas production since 2010 and notes that “[t]his growth trend is expected to continue over the next several decades.”¹⁴⁵ Pointing to the U.S. Energy Information Administration’s (EIA) *Annual Energy Outlook 2020* (AEO 2020)—the most recent data from EIA at the date of the Application—PALNG Phase II states, for example, that EIA has “significantly increased its estimates of shale gas production through 2050 as compared to its projections in prior years.”¹⁴⁶

PALNG Phase II asserts that this growth in shale production has been accompanied by an increase in the overall volume of U.S. natural gas resources.¹⁴⁷ PALNG Phase II cites EIA’s increasing estimates of recoverable natural gas resources between 2009 and 2020.¹⁴⁸ PALNG Phase II also points to estimates provided by ICF International, Inc. (ICF), the independent consulting firm commissioned by PALNG Phase II to assess the domestic market and economic effects of the proposed Expansion Project.¹⁴⁹ According to ICF, there were 3,693 trillion cubic

¹⁴³ *Id.* at 19-20; *see also id.* at 14 (stating that, when new resources of natural gas are added to conventional producing formations, “it is evident that the United States has more than sufficient supply to serve domestic needs and accommodate the proposed exports from the Expansion Project”).

¹⁴⁴ *Id.* at 20.

¹⁴⁵ *Id.* at 20-21.

¹⁴⁶ *Id.* at 21 (citing, *e.g.*, U.S. Energy Info. Admin., *Annual Energy Outlook 2020* (with projections to 2050) (Jan. 2020), at Table 14, <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=14-AEO2020&cases=ref2020&sourcekey=0>). Each Annual Energy Outlook (AEO) presents EIA’s long-term projections of energy supply, demand, and prices, based on results from EIA’s NEMS model.

¹⁴⁷ PALNG Phase II App. at 21.

¹⁴⁸ *Id.*

¹⁴⁹ As Appendix B to its Application, PALNG Phase II provides ICF’s Report entitled, *Economic Impacts of the Proposed Port Arthur Trains 3 & 4 Liquefaction Project: Information for DOE Non-FTA Permit Application* (Feb. 13, 2020) [hereinafter ICF Report]. *See also* PALNG Phase II App. at 7 & n.12 (introducing ICF Report).

feet (Tcf) of technically recoverable natural gas in the lower-48 U.S. states as of 2016 (2,133 Tcf of which was attributable to shale gas), with a “large component” of the technically recoverable resource being “economic at relatively low wellhead prices.”¹⁵⁰ PALNG Phase II adds that “further increases are anticipated in the amount of the technically recoverable resource that can be economically developed,” citing ICF’s estimates that the volume of natural gas “in the Lower 48 that is economic at \$5/MMBtu [will] increase from 1,225 Tcf to 2,160 Tcf, a 76% increase.”¹⁵¹

Turning to domestic natural gas demand, PALNG Phase II asserts that, “[a]lthough domestic demand for natural gas is anticipated to grow, the rate of demand increase will continue to be outpaced by the growth of available supply.”¹⁵² Citing EIA data and the ICF Report, PALNG Phase II provides estimates of growth in demand for natural gas in various domestic sectors through 2050, including the power sector, the industrial sector, and the residential and commercial sectors.¹⁵³ On the basis of ICF’s estimates, PALNG concludes that, “[d]espite the projected growth in domestic demand through the forecast period of 2045, U.S. natural gas resources ... are wholly adequate to satisfy domestic demand as well as the added demand of LNG exports from the Expansion Project, even when other LNG exports are assumed.”¹⁵⁴

C. Effects on Domestic Prices of Natural Gas

According to PALNG Phase II, ICF found that any price increases due to additional LNG exports produced by the Expansion Project “will be minimal.”¹⁵⁵ PALNG Phase II observes that, as a consequence of growing natural gas demand and increased reliance on new sources of

¹⁵⁰ PALNG Phase II App. at 21-22 (citing ICF Report).

¹⁵¹ *Id.* at 22 (citing ICF Report).

¹⁵² *Id.*

¹⁵³ *Id.* at 23.

¹⁵⁴ *Id.* at 24; *see also id.* at 7.

¹⁵⁵ *Id.* at 28.

supply, natural gas prices are expected to increase in the future, even without exports from the Expansion Project.¹⁵⁶ Nonetheless, according to PALNG Phase II, this increased demand will not cause significant price hikes because “unconventional production will increasingly be relied upon to offset declining conventional production, and the cost of production of unconventional natural gas is estimated to be much lower on a per-unit basis than that of conventional sources.”¹⁵⁷ Pointing to the ICF Base Case—which projects that prices at Henry Hub are expected to increase gradually to \$4.04/MMBtu in 2045—PALNG Phase II predicts that prices “will be high enough to foster sufficient supply development to meet growing demand, but not so high as to discourage the demand growth.”¹⁵⁸

PALNG Phase II maintains that the balance between the domestic supply and demand forecasts for the U.S. natural gas market shows that the volumes proposed to be exported from the Expansion Project are not needed by the domestic market.¹⁵⁹ PALNG Phase II asserts that “[t]his lack of domestic need, combined with the minimal impacts to U.S. prices ... demonstrates that the export of such volumes is not inconsistent with the public interest.”¹⁶⁰

D. Local, Regional, and National Economic Benefits

PALNG Phase II asserts that the Expansion Project will have a positive impact on the local, regional, and national economies in numerous ways, including “through increased economic activity, tax revenues, and job creation during both construction and operation.”¹⁶¹ Citing the ICF Report, for example, PALNG Phase II asserts that, “[t]hrough 2046, the estimated total economic gains associated with the Expansion Project are over \$5.7 billion annually for the

¹⁵⁶ PALNG Phase II App. at 28 (citing ICF Report).

¹⁵⁷ *Id.* at 28-29.

¹⁵⁸ *Id.* at 29.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

U.S. economy, including \$1.1 billion annually for the Texas economy.”¹⁶²

More specifically, PALNG Phase II expects the Expansion Project to “result in significant employment impacts across a number of industries, both locally and nationwide.”¹⁶³ PALNG Phase II estimates that the Expansion Project “will create an average of nearly 27,700 jobs for the U.S. economy per year from 2021 through 2046.”¹⁶⁴ The Expansion Project is also expected to result in approximately 9,000 jobs annually in Texas over the same forecast period.¹⁶⁵

PALNG Phase II further asserts that the Expansion Project will increase tax revenues on both the state and federal level. Specifically, the ICF Report estimates that total government revenues in Texas “are estimated to increase by \$140.2 million annually through 2046” as a result of the Expansion Project,¹⁶⁶ equating “to a cumulative impact on Texas government revenues of approximately \$3.6 billion.”¹⁶⁷

On the federal level, PALNG Phase II states that exports from the Expansion Project “are estimated to result in an increase in collective government revenues of \$1.9 billion annually,” equating to a cumulative impact of \$49 billion of governmental revenue over the forecast period between 2021 and 2046.¹⁶⁸

E. International Trade and Geopolitical Benefits

Citing ICF’s findings, PALNG Phase II states that the Expansion Project “will generate an expected cumulative value of approximately \$77.3 billion of LNG exports over a projected 20-year export term,” which will “favorably influence” the balance of trade that the United

¹⁶² PALNG Phase II App. at 7-8, 30 (citing ICF Report).

¹⁶³ *Id.* at 30.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ *Id.* (citing ICF Report).

¹⁶⁸ PALNG Phase II App. at 30.

States has with its international trading partners.¹⁶⁹ Specifically, PALNG Phase II states that “[t]he expected value of the exports from the Expansion Project is estimated to reduce the U.S. balance of trade deficit by \$3.7 billion annually between 2026 and 2046, based on the value of LNG export volumes, liquids produced in association with incremental gas and other trade effects.”¹⁷⁰

Next, PALNG Phase II asserts that LNG exports will diversify the global supply of energy resources. This, in turn, “will support the geopolitical security interests of the United States by providing energy supply alternatives to its allies.”¹⁷¹ Additionally, according to PALNG Phase II, exports of domestically produced LNG “will promote liberalization of the global [natural] gas market by fostering increased liquidity and trade at prices established by market forces.”¹⁷² PALNG Phase II contends that, by introducing additional market-based structures, the Expansion Project “will help to reduce premiums charged to economies which do not currently have sufficient energy supply alternatives and [to] reduce gas price volatility around the world.”¹⁷³

F. Environmental Benefits

Citing DOE’s 2014 Life Cycle Greenhouse Gas Report and the 2019 Update (*see supra* § II.A), PALNG Phase II states that “LNG exports can have significant environmental benefits as natural gas is cleaner burning than other fossil fuels.”¹⁷⁴ PALNG thus argues that an increased supply of natural gas made possible through LNG exports “can help countries move away from

¹⁶⁹ *Id.* at 31.

¹⁷⁰ *Id.* (citing ICF Report).

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.* at 32.

¹⁷⁴ PALNG Phase II App. at 32.

less environmentally friendly fuels” by, for example, displacing the current consumption of coal in power generation.¹⁷⁵

VII. CURRENT PROCEEDING BEFORE DOE

DOE published the Notice of Application in the *Federal Register* on March 30, 2020, setting a deadline for protests, motions to intervene, and written comments on the non-FTA portion of the Application, as amended, “no later than 4:30 p.m., Eastern time, April 29, 2020.”¹⁷⁶ DOE did not receive any timely-filed submissions. However, on November 26, 2024, Sierra Club submitted a “Motion to Intervene and Protest Out of Time” (Late-Filed Pleading) opposing the Application.¹⁷⁷ Subsequently, PALNG Phase II timely filed an Answer in Opposition to Sierra Club’s Motion to Intervene and Protest Out of Time (Answer).¹⁷⁸ These filings are summarized below.

A. Sierra Club’s Motion to Intervene and Protest Out of Time

Sierra Club states that it “has over 19,900 members in Texas, including many living near the Port Arthur LNG terminal and others living throughout Texas’ Haynesville Shale and Permian Basin.”¹⁷⁹ Sierra Club adds that it “has over 3,500 members in [nearby] Louisiana, including many in the Barnett Shale region and other areas that will likely be impacted by increased gas production.”¹⁸⁰

Sierra Club acknowledges that it did not move to intervene “back in March 2020” when DOE provided notice of the PALNG Phase II Application in the *Federal Register* and solicited

¹⁷⁵ *Id.* at 32-33.

¹⁷⁶ Notice of App., 85 Fed. Reg. at 17,568; *see also supra* § I.

¹⁷⁷ *See* Sierra Club Late-Filed Pleading, *supra* note 20. Under DOE’s regulations, a late motion to intervene may be accepted for good cause and after consideration of the impact of granting the motion on the proceeding. *See* 10 C.F.R. § 590.303(d). A late protest may be accepted for good cause. *Id.* § 590.304(e).

¹⁷⁸ *See* PALNG Phase II Answer, *supra* note 21.

¹⁷⁹ Sierra Club Late-Filed Pleading at 9.

¹⁸⁰ *Id.*

interventions in the docket, but argues that the “facts regarding U.S. LNG exports have changed drastically” since the Notice of Application was published.¹⁸¹ According to Sierra Club, DOE has acknowledged that the “global [LNG] markets have changed, Europe has rapidly transitioned away from fossil fuels, [] DOE’s prior analyses no longer apply, and increasing lower-48 LNG exports imposes real costs on American consumers and industry.”¹⁸²

Turning to DOE’s regulation governing intervention,¹⁸³ Sierra Club argues that good cause exists for its late intervention and protest, and that its intervention at this stage will not adversely impact the proceeding. Sierra Club states that DOE recently granted other groups leave to intervene out of time in the *Alaska LNG* proceeding, and claims that DOE “has not been especially strict” so long as applicants “make good faith efforts to demonstrate compliance” with the good cause requirement for filing out of time.¹⁸⁴

Next, Sierra Club argues that, because DOE’s regulations do not specify what constitutes “good cause,” DOE “should interpret the term with reference to FERC’s interpretation of the rules it applies in administering the Natural Gas Act, and with reference to how federal courts interpret their rules on good cause to file out of time.”¹⁸⁵ According to Sierra Club, “courts and FERC have focused their ‘good cause’ inquiries on the amount of prejudice arising from the delay,” and DOE should adopt the same approach.¹⁸⁶ Sierra Club further asserts that FERC, in administering its own NGA proceedings, “almost uniformly concludes that there would be no

¹⁸¹ *Id.* at 1.

¹⁸² *Id.*

¹⁸³ *Id.* at 3 (citing 10 C.F.R. §§ 590.303(d), 590.304(e)).

¹⁸⁴ *Id.* at 4 (citing *Alaska LNG Project LLC*, DOE/FECM Order No. 3643-C, Docket No. 14-96-LNG, at 21 (Apr. 13, 2023)).

¹⁸⁵ Sierra Club Late-Filed Pleading at 4.

¹⁸⁶ *Id.* at 4-5 (also asserting that, “where there is no prejudice resulting from delay, that fact in itself can demonstrate ‘good cause’ for purposes of deciding whether to allow late intervention”).

prejudice resulting from late intervention” and grants late motions to intervene if “filed before FERC issues its order on the merits.”¹⁸⁷

On this basis of equating a lack of prejudice arising from its delay with a showing of good cause, Sierra Club argues that PALNG Phase II is not prejudiced by Sierra Club’s intervention and protest at this stage of the proceeding (*i.e.*, before DOE’s issuance of an order on the merits).¹⁸⁸ Sierra Club further claims that “[t]here have not been any proceedings in this docket that would have gone differently had Sierra Club moved to intervene or protested by the original [2020] deadline.”¹⁸⁹ In addition, Sierra Club argues that its current intervention, although late, is similar to its timely intervention in another proceeding (Venture Global CP2 LNG, LLC, Docket No. 21-131-LNG), and that “[t]he absence of such differences” between the two demonstrates that its Late-Filed Pleading “will not cause any meaningful prejudice here.”¹⁹⁰ Adding that DOE must make an independent assessment of the public interest regardless of whether anyone has protested the Application,¹⁹¹ Sierra Club reasons that “the lack of prejudice is itself sufficient to permit intervention here.”¹⁹²

Nonetheless, Sierra Club also contends that, “insofar as any further showing of good cause is required,” it “has good cause for not having filed a motion to intervene and protest in response to DOE’s initial solicitation” because “the basis for Sierra Club’s protest consists of facts arising after the April 29, 2020 deadline” set forth in the Notice of Application.¹⁹³ Sierra

¹⁸⁷ *Id.* at 5.

¹⁸⁸ *Id.* at 4-6.

¹⁸⁹ *Id.* at 6.

¹⁹⁰ *Id.*

¹⁹¹ Sierra Club Late-Filed Pleading at 7.

¹⁹² *Id.*

¹⁹³ *Id.*

Club characterizes statements allegedly made by DOE between January and August 2024.¹⁹⁴ Sierra Club further acknowledges that it “has other interests in this proceeding ... which were evident at the time DOE provided notice,” but argues that it “did not foresee the changes in global energy markets and DOE’s potential treatment thereof.”¹⁹⁵ According to Sierra Club, “[t]hat fact, coupled with Sierra Club’s acknowledgment of the obligation to address good cause and the lack of prejudice resulting from delay, justifies leave to intervene and protest out of time here.”¹⁹⁶

B. PALNG Phase II’s Answer in Opposition to Sierra Club’s Motion to Intervene and Protest Out of Time

In its Answer, PALNG Phase II asks DOE to deny Sierra Club’s Motion to Intervene Out of Time and to dismiss Sierra Club’s protest opposing the Application.¹⁹⁷

PALNG Phase II argues that Sierra Club has failed to show good cause for its out-of-time intervention and protest. PALNG Phase II emphasizes that Sierra Club’s Late-Filed Pleading was filed “nearly *five years* past DOE/FECM’s comment deadline in this proceeding.”¹⁹⁸ Further, according to PALNG Phase II, Sierra Club’s Late-Filed Pleading is “the latest in a series of late interventions and protests filed by Sierra Club that flagrantly disregards DOE’s regulations and procedural requirements, threatens to unfairly prejudice applicants, and attempts to disrupt the orderly administration of DOE/FECM’s export proceedings.”¹⁹⁹

¹⁹⁴ According to Sierra Club, DOE allegedly stated in January 2024 that DOE’s prior analyses no longer provide a sufficient foundation for analyzing export applications; argued in May 2024 that reducing lower-48 exports will reduce domestic natural gas prices and thereby benefit the public; and concluded in August 2024 that it is no longer clear whether long-term exports are in the United States’ interest. *See id.*

¹⁹⁵ *Id.* at 7-8.

¹⁹⁶ *Id.* at 8.

¹⁹⁷ PALNG Phase II Answer at 1; *see also* PALNG Phase II Answer at 42-43.

¹⁹⁸ *Id.* at 1 (emphasis in original).

¹⁹⁹ *Id.*

Specifically, PALNG Phase II asserts that Sierra Club “ignores the DOE’s rules by stating that there is no particular standard for timely intervention or what constitutes ‘good cause’” for late intervention.²⁰⁰ Pointing to DOE’s regulation governing the timing of intervention (10 C.F.R. § 590.303(d)), PALNG Phase II states that Sierra Club “disregards each aspect of this regulation”—making “only a token effort to demonstrate the requisite good cause to accept its extremely late filing” and “no attempt to address the impacts of its late-filed intervention.”²⁰¹

PALNG Phase II further observes that Sierra Club has moved to intervene in numerous export authorization proceedings before DOE, yet has not demonstrated why it could not have raised these issues in a timely manner within the comment period designated by DOE in this proceeding.²⁰² PALNG Phase II argues that “Sierra Club had both *constructive* notice of the Application from the DOE/FECM’s [*Federal Register* notice] and *actual* notice evidenced from its participation in the Port Arthur LNG Phase II FERC proceeding *at least as early as February 2021* when it filed comments with FERC.”²⁰³ PALNG Phase II notes that Sierra Club’s comments submitted to FERC in February 2021 explicitly discussed PALNG Phase II’s DOE Application, yet Sierra Club’s November 26, 2024 motion to intervene out of time did not mention Sierra Club’s actual knowledge of this proceeding at this earlier stage (*i.e.*, in February 2021).²⁰⁴ According to PALNG Phase II, this fact “bears significantly in establishing the unreasonableness of Sierra Club’s delay in pressing its motion for leave to intervene ... and assessing the thin case it makes for demonstrating good cause for its behavior.”²⁰⁵

²⁰⁰ *Id.* at 3-4.

²⁰¹ *Id.* at 4.

²⁰² *Id.* at 5; *see also id.* at 21.

²⁰³ PALNG Phase II Answer at 5 (emphasis in original).

²⁰⁴ *Id.* at 6.

²⁰⁵ *Id.*

PALNG Phase II also points to several past examples “unacknowledged by Sierra Club” in which DOE rejected Sierra Club’s motions to intervene filed anywhere from 16 months to almost two years late because such filings “would be prejudicial and disruptive.”²⁰⁶ In particular, PALNG Phase II characterizes Sierra Club’s “purported unfamiliarity” with the obligations of DOE’s regulations as “remarkable,” given “that nearly the entire corpus of agency precedent developed to explain the operation of those regulations in the modern era of LNG exports has been developed to respond to Sierra Club’s repeated disregard of those requirements.”²⁰⁷

Addressing Sierra Club’s reliance on DOE’s actions in the *Alaska LNG* proceeding, PALNG Phase II argues that the facts leading DOE to find good cause for the late intervention in that proceeding were unique and “easily distinguishable” from the current proceeding—as DOE, in the rehearing phase of the *Alaska LNG* proceeding, had “issued a draft environmental document raising novel issues for comment” in that proceeding.²⁰⁸ By contrast, PALNG Phase II argues, “the entire purpose” of Sierra Club’s filing in this proceeding “is to introduce new material into the record, without regard to any deadline, and years after the time for doing so has passed.”²⁰⁹

Next, PALNG Phase II argues that, because Sierra Club “[knows] that it cannot meet the standard for late intervention ... Sierra Club asserts a bizarre and indefensible theory that wrongly conflates ‘good cause’ with ‘lack of prejudice.’”²¹⁰ PALNG Phase II addresses the “obscure federal cases” cited by Sierra Club to address timeliness, stating that the cases involve “wholly distinguishable contexts.”²¹¹

²⁰⁶ See *id.* at 6-7 (citations omitted).

²⁰⁷ *Id.* at 7.

²⁰⁸ *Id.* at 8.

²⁰⁹ PALNG Phase II Answer at 9.

²¹⁰ *Id.*

²¹¹ *Id.* at 9-10.

Turning to the FERC decisions cited by Sierra Club, PALNG Phase II states that, “DOE need not look to FERC cases when its own precedent . . . is clear.”²¹² Nonetheless, PALNG Phase II contends that Sierra Club is also wrong about the FERC’s practice for permitting late intervention because (among other reasons) “the cases cited by Sierra Club for the proposition that FERC routinely grants late intervention were superseded in 2018.”²¹³ PALNG Phase II argues that FERC has “current strict requirements when evaluating late motions to intervene,” as shown in a recent FERC proceeding (*Venture Global CP2 LNG, LLC*) in which “FERC emphasized that demonstrating good cause for late intervention is the primary requirement and that if the movant does not show good cause, FERC need not even consider the other factors under its regulation.”²¹⁴

Addressing Sierra Club’s “one-paragraph” attempt to show good cause, PALNG Phase II argues that Sierra Club’s argument cannot withstand scrutiny. For example, PALNG Phase II contends that other than listing “facts” concerning DOE’s actions in 2024, Sierra Club does not explain how these “facts” or other circumstances justify its late intervention.²¹⁵

Turning to the issue of prejudice, PALNG Phase II argues that “the prejudicial impact of granting the motion weighs strongly in favor of rejecting the filing.”²¹⁶ Citing the “advanced stage” of this proceeding (among other factors), PALNG Phase II argues that Sierra Club’s Late-Filed Pleading has “substantially prejudiced” PALNG Phase II, DOE’s process, and other stakeholders interested in the orderly disposition of this proceeding.²¹⁷ PALNG Phase II

²¹² *Id.* at 10.

²¹³ *Id.* at 11 (citing *Tenn. Gas Pipeline Co.*, 162 FERC ¶ 61,167 (2018)).

²¹⁴ *Id.* at 11-12 (citing *Venture Global CP2 LNG, LLC*, 189 FERC ¶ 61,148 (2024)); *see also id.* at 13-16 (stating, *e.g.*, that Sierra Club’s “months-long delay in pressing to intervene following the occurrence of the cited events [in 2024] demonstrates that it has fallen well short of the degree of diligence that would support a finding of good cause in this case”).

²¹⁵ PALNG Phase II Answer at 11-12.

²¹⁶ *Id.* at 17.

²¹⁷ *Id.*; *see also id.* at 19-22 (discussing prejudice arising from Sierra Club’s Late-Filed Pleading).

maintains that “opponents to an export proceeding cannot be allowed to wait until the last moment to begin the process of establishing a record to carry their burden” that the Application should be denied under NGA section 3(a).²¹⁸ PALNG Phase II adds that “Sierra Club makes the extraordinary assertion that it should be permitted to intervene and protest at any point in an administrative proceeding prior to the instant that the agency has made a final decision,” arguing that “[a]doption of [such a] course of action would be disastrous for the regular conduct of administrative procedure.”²¹⁹

Finally, PALNG Phase II contends that, even if DOE were to substantively consider Sierra Club’s protest, “Sierra Club’s arguments should be rejected because they variously mischaracterize the public interest standard, echo arguments that Sierra Club has made and DOE/FECM has rejected in the past, or make unsupported claims regarding the impacts of the proposed exports.”²²⁰

VIII. DISCUSSION AND CONCLUSIONS

In reviewing the non-FTA portion of PALNG Phase II’s Application, DOE has considered its obligations under NGA section 3(a) and NEPA, as well as the directives of E.O. 14154. To accomplish these purposes, DOE has examined a range of information addressing economic and non-economic factors, including but not limited to:

- PALNG Phase II’s Application and the Amendment to the Application;
- The 2024 LNG Export Study, including comments received in response to that Study; and
- The Marine Transport Technical Support Document, prepared by DOE as part of its 2020 NEPA rulemaking revising the B5.7 categorical exclusion.

²¹⁸ *Id.* at 22.

²¹⁹ *Id.* at 18.

²²⁰ *Id.* at 23.

A. Procedural Matters

Under DOE’s regulations, “[m]otions to intervene may be filed at any time following the filing of an application, but no later than the date fixed for filing such motions or notices in the applicable [FECM] notice or order.”²²¹ The deadline for motions to intervene and protests addressing PALNG Phase II’s Application was established in the *Federal Register* as April 29, 2020.²²² Sierra Club—an experienced participant in LNG export proceedings—admits that it had “interests in this proceeding ... which were evident at the time DOE provided notice [of the Application].”²²³ Yet, Sierra Club did not file its motion to intervene and protest until November 26, 2024. Moreover, as PALNG Phase II points out, Sierra Club referenced PALNG Phase II’s pending Application only a few months after the April 29, 2020 deadline—in comments addressing the proposed Expansion Project filed with FERC on February 16, 2021—thus demonstrating Sierra Club’s knowledge of this DOE proceeding several years before it filed its Late-Filed Pleading on November 26, 2024.²²⁴

Nonetheless, DOE may allow the filing of a motion to intervene at a “later date ... for good cause shown and after considering the impact of granting the late motion [on] the proceeding.”²²⁵ Accordingly, when considering Sierra Club’s motion to intervene out of time, we evaluate whether Sierra Club has shown good cause for the late intervention and the impact of granting its late motion on this proceeding.

²²¹ 10 C.F.R. § 590.303(d) (emphasis added).

²²² See *supra* § I.A.

²²³ Sierra Club Late-Filed Pleading at 7 (emphasis added).

²²⁴ See PALNG Phase II Answer at 6 & n.17 (citing Comments and Exhibits of Sierra Club, FERC Docket No. CP20-55-000 at 15-17 (Accession No. 20210217-5017) (Feb. 16, 2021)). DOE observes that, in these comments to FERC on the Expansion Project, Sierra Club referenced “the pending DOE request for authorization to export [natural] gas from the expanded Port Arthur facility to ‘non-free trade agreement’ nations” in “DOE/FE Docket 20-23.” See Comments and Exhibits of Sierra Club at 15 & n.71.

²²⁵ 10 C.F.R. § 590.303(d).

1. Lack of Good Cause for Late Intervention

Sierra Club acknowledges that its motion to intervene is out of time, but it asserts that various new “facts” provide good cause for intervention at this stage.²²⁶ These arguments are based on an inaccurate characterization of DOE’s precedent concerning late intervention, among other flaws set forth below.

Sierra Club states that, as of the April 29, 2020 deadline set forth in the Notice of Application, it “did not foresee the changes in global energy markets and DOE’s potential treatment thereof,” and thus did not move to intervene in this proceeding at that time.²²⁷ Contrary to this argument, however, Sierra Club had an opportunity to intervene in this proceeding during the established 60-day comment period in 2020 when the global LNG energy market—and DOE’s related policy considerations—had already been undergoing significant developments. For example, in early January 2020, DOE completed its public proceeding to update its 2014 Life Cycle Greenhouse Gas Report, entitled *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update* (2019 Update)—concluding that the 2019 Update “supports the proposition that exports of LNG from the lower-48 states will not be inconsistent with the public interest.”²²⁸ Sierra Club was an active participant in that proceeding, commenting on the impacts of increasing the “global availability of natural gas” on global GHG emissions, among other topics.²²⁹ Additionally, the following month, on February 11, 2020, DOE gave notice of a new proposal to extend the length of non-FTA LNG export authorizations through December 31, 2050, based on updated information

²²⁶ Sierra Club Late-Filed Pleading at 7; *see also id.* at 1 (stating that “facts regarding U.S. LNG exports have changed drastically since [DOE] solicited interventions in this docket”).

²²⁷ PALNG Phase II Answer at 7-8; *see also id.* at 1.

²²⁸ *See* U.S. Dep’t of Energy, *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update – Response to Comments*, 85 Fed. Reg. 72, 86 (Jan. 2, 2020).

²²⁹ *Id.* at 80.

including the 2019 Update (a policy finalized several months later).²³⁰ We thus do not find it credible that Sierra Club could not have “foreseen” a basis to intervene in this proceeding until nearly five years after the designated intervention period.

Further, as one of the “changed” facts since April 2020, Sierra Club claims that “DOE’s prior analyses no longer apply” as of its Late-Filed Pleading in November 2024.²³¹ However, the current 2024 LNG Export Study is only DOE’s most recent update to its economic and environmental analyses that inform its non-FTA decisions, as Sierra Club knows due to its involvement in such proceedings.²³² Sierra Club was thus on notice prior to the April 29, 2020 deadline in this proceeding that DOE not only would rely on these economic and environmental analyses in considering the Application, but that DOE could update those studies for LNG exports in the future.

Additionally, DOE’s actions in the Alaska LNG proceeding—specifically, in DOE/FECM Order No. 3643-C²³³—do not support Sierra Club’s position because that proceeding involved very different factual circumstances. DOE allowed two environmental organizations (collectively, Movants) to intervene out of time during the rehearing stage of that proceeding involving a new supplemental EIS prepared by DOE—not merely because of possible new industry-wide “facts” arising after the original comment deadline.²³⁴ Indeed, in Order No. 3643-C, DOE stated that the late-filed motion to intervene presented “a question of first impression” where “Movants filed this motion during an ongoing rehearing proceeding

²³⁰ See U.S. Dep’t of Energy, Extending Natural Gas Export Authorizations to Non-Free Trade Agreement Countries Through the Year 2050; Notice of Proposed Policy Statement and Request for Comments, 85 Fed. Reg. 7672 (Feb. 11, 2020).

²³¹ Sierra Club Late-Filed Pleading at 1.

²³² See *supra* § II.A.

²³³ *Alaska LNG Project LLC*, DOE/FECM Order No. 3643-C, Docket No. 14-96-LNG, Order Affirming and Amending DOE/FE Order No. 3643-A Following Partial Grant of Rehearing (Apr. 13, 2023).

²³⁴ See *Alaska LNG Project LLC*, DOE/FECM Order No. 3643-C, at 4-5 (describing the two studies comprising the Alaska LNG supplemental EIS).

granted to conduct additional environmental analysis, where Movants seek to address this new environmental analysis prepared in a Draft SEIS issued under NEPA, and where Movants filed the motion on the last day of the public comment period established by DOE for the Draft SEIS.”²³⁵ None of those narrow circumstances applies in this proceeding.

Accordingly, we are not persuaded by Sierra Club’s argument that, years after the intervention deadline, the 2024 LNG Export Study or other new “facts” arising in 2024 constitute good cause giving rise to a basis for late intervention. If DOE were to adopt this position, any interested person or organization could assert good cause for late intervention in any pending export proceeding whenever DOE issued a new or updated LNG study or when global LNG market conditions change,²³⁶ in contravention of DOE’s regulations and process. We agree with PALNG Phase II that there is no precedent to support this argument.²³⁷

Next, we reject Sierra Club’s arguments that DOE should follow the rules, regulations, and/or practice of FERC and federal courts in interpreting the meaning of “good cause” in 10 C.F.R. § 590.303(d). Sierra Club asserts, in particular, that DOE should focus its good cause analysis for late intervention “on the amount of prejudice arising from the delay,” citing “courts and FERC.”²³⁸ Sierra Club also contends that DOE should accept its late intervention here because DOE had not yet issued its order on the merits, citing FERC practice.²³⁹ This is neither a FERC proceeding nor a judicial proceeding, however, and DOE has its own intervention regulation, with its own standard for late intervention.²⁴⁰ Sierra Club does not cite any DOE

²³⁵ *Id.* at 16.

²³⁶ *See* Sierra Club Late-Filed Pleading at 1.

²³⁷ *See, e.g.*, PALNG Phase II Answer at 5-7.

²³⁸ Sierra Club Late-Filed Pleading at 4.

²³⁹ *Id.* at 6.

²⁴⁰ *See also, e.g.*, PALNG Phase II Answer at 7, 10 (asserting that “just as [Sierra Club] has misconstrued relevant DOE/FECM procedures under Section 3 of the NGA, Sierra Club is also wrong about the FERC’s processes for permitting late intervention in the context of NGA Section 7 pipeline and Section 3 LNG facilities”).

precedent to support its arguments—most notably that intervention prior to a DOE order on the merits is not prejudicial and thus should be allowed.

It is surprising that Sierra Club states that DOE “has not been especially strict” in this regard, when DOE has denied various late intervention efforts by Sierra Club prior to a decision on the merits.²⁴¹ Indeed, as PALNG Phase II observes, “nearly the entire corpus of [DOE’s] precedent” developed to explain the operation of DOE’s intervention regulations “in the modern era of LNG exports” has been developed to respond to Sierra Club’s late filings in various proceedings.²⁴² For example, in 2022, DOE denied Sierra Club’s motion to intervene out of time “in two different LNG export proceedings—nearly two years after the deadline established in the *Federal Register* for such filings and before DOE had issued a final order on each pending export application.”²⁴³ Sierra Club does not acknowledge this adverse DOE precedent, nor does it provide a basis for a different result here.

In sum, we agree with PALNG Phase II that Sierra Club has failed to show good cause to become a party to this proceeding almost five years after the established deadline, as required by 10 C.F.R. § 590.303(d).²⁴⁴

2. Impact of Late Intervention on This Proceeding

Because we conclude that Sierra Club has not demonstrated good cause, we do not need to address the second consideration for late intervention—“the impact of granting the late motion [on] the proceeding.”²⁴⁵ Nonetheless, we agree with PALNG Phase II that allowing Sierra Club

²⁴¹ As explained above, the late intervention allowed by DOE in the Alaska LNG rehearing proceeding, relied upon by Sierra Club, is in a unique category of its own.

²⁴² PALNG Phase II Answer at 4.

²⁴³ See *Alaska LNG Project LLC*, DOE/FECM Order No. 3643-C, at 17 & n.90 (citing the *Energía Costa Azul, S. de R.L. de C.V.* and *Vista Pacifico LNG, S.A.P.I. de C.V.* proceedings, in which DOE concluded that Sierra Club “provided no grounds for DOE to consider the late filing,” including any demonstration of good cause).

²⁴⁴ See, e.g., PALNG Phase II Answer at 13-14.

²⁴⁵ 10 C.F.R. § 590.303(d).

to intervene in and protest the Application at this late stage—opening the door to a rehearing request, a possible court challenge, and other uncertainties—would be harmful to PALNG Phase II and its business interests.²⁴⁶ PALNG Phase II points out, for example, that DOE’s regulations state that any party granted a late intervention “shall accept the record of the proceeding as it was developed prior to the intervention.”²⁴⁷ According to PALNG Phase II, Sierra Club’s Late-Filed Pleading, if accepted, “would violate that regulation” by “transform[ing] what has been an uncontested proceeding for almost five years into a contested proceeding and to introduce new arguments and new material into the record at the eleventh hour.”²⁴⁸ Similarly, as discussed above, we find that such intervention would be contrary to DOE precedent and disruptive to this proceeding and DOE’s administrative process.

As DOE previously observed, “at some point, the opportunity for interested persons to intervene as parties in a proceeding must close” to “ensure that the resolution of a proceeding and the issuance of a final order are not unduly delayed by inattentiveness or intentional delay.”²⁴⁹ For the reasons set forth above, we dismiss Sierra Club’s Late-Filed Pleading in its entirety.²⁵⁰ Because this dismissal is on procedural grounds, we do not address the merits of its arguments.

²⁴⁶ See PALNG Phase II Answer at 1, 7.

²⁴⁷ 10 C.F.R. § 590.303(h) (quoted in PALNG Phase II Answer at 16 & n.52).

²⁴⁸ PALNG Phase II Answer at 16.

²⁴⁹ *Golden Pass LNG Terminal LLC*, DOE/FECM Order No. 3978-F, Docket No. 12-156-LNG, Order Denying Request for Rehearing of Order Amending Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, at 7 (June 24, 2022) (internal quotation and citation omitted).

²⁵⁰ See *infra* § XI(Ordering Para. N). For the same reasons that Sierra Club fails to establish good cause for late intervention, we conclude that Sierra Club has failed to establish good cause for its late-filed protest. See 10 C.F.R. § 590.304(e); see also, e.g., *Commonwealth LNG, LLC*, DOE/FECM Order No. 5238, Docket No. 19-134-LNG, Order Conditionally Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, at 32-40 (Feb. 14, 2025).

B. Economic Issues

1. Significance of the 2024 LNG Export Study on Economic Issues

As discussed above, DOE commissioned the 2024 LNG Export Study and invited public comments on the Study. DOE evaluated this material in its Response to Comments on the 2024 LNG Export Study, published in the *Federal Register* on May 22, 2025.²⁵¹

DOE concluded in the Response to Comments that U.S. domestic natural gas supply is sufficient to meet domestic and market-based global demand for U.S. natural gas, including LNG, in all scenarios.²⁵² Additionally, DOE found that increasing LNG exports results in an increase to U.S. GDP in all cases examined, including by an estimated \$410 billion cumulatively for the period 2020 through 2050 under the Reference case.²⁵³ Indeed, the 2024 Study shows macroeconomic benefits to the U.S. economy across the range of scenarios analyzed.²⁵⁴ DOE also concluded that higher levels of U.S. LNG exports will provide additional economic benefits through improvements to the U.S. trade balance, increased federal and state tax revenues, and increased jobs.²⁵⁵

Turning to the potential impact of LNG exports on domestic natural gas prices, DOE found that “[i]ncreased LNG exports are projected to have relatively modest impacts on prices.”²⁵⁶ In particular, “any domestic price impact is expected to be minimal due to the abundant supply of natural gas in the United States.”²⁵⁷ DOE further determined that U.S. LNG

²⁵¹ See *supra* § III.D.

²⁵² Response to Comments at 43; see also *id.* at 21.

²⁵³ See *id.* at 47.

²⁵⁴ See *id.*

²⁵⁵ *Id.* at 48 (stating that, although the 2024 Study does not specifically quantify the U.S. trade balance, DOE finds that an increase in the quantity of U.S. products sold abroad works to improve the balance of trade, and thus “DOE agrees that an improved trade balance would be an important benefit of greater LNG exports”); see also *id.* at 49 (stating that the 2024 Study “did not quantify job or wage revenues attributable to the construction and operation of LNG facilities,” but that DOE “postulates that LNG export facilities have a positive impact on the U.S. job market” based on quantitative information provided by several commenters).

²⁵⁶ *Id.* at 46, 48.

²⁵⁷ *Id.* at 46.

exports have not had a “consistent effect” on the price of domestic natural gas to date.²⁵⁸

Specifically, DOE found that the potential price impacts from increased LNG exports modeled in the 2024 Study “are within the range of prices observed over the past five years” (*i.e.*, since 2018)—and, moreover, are below the long-term price increases from U.S. LNG exports projected in DOE’s prior economic study, the 2018 LNG Export Study.²⁵⁹

Table 1 below shows a comparison of EIA’s projections in the *Annual Energy Outlook 2017* (AEO 2017)²⁶⁰ that formed the basis of the 2018 LNG Export Study and DOE’s projections in the 2024 LNG Export Study.²⁶¹ For the year 2050, the 2024 LNG Study projects LNG exports of 56.3 Bcf/d of natural gas—more than quadruple the level projected in the 2018 LNG Export Study at 12.7 Bcf/d.²⁶² Over the same projection period, the 2024 Study projects an average Henry Hub natural gas price of \$4.62/MMBtu, a decrease of 28% from \$6.40/MMBtu in real dollars projected under the 2018 Study.

²⁵⁸ Response to Comments at 46-47.

²⁵⁹ *Id.*

²⁶⁰ U.S. Energy Info. Admin., *Annual Energy Outlook 2017* (with projections to 2050) (Jan. 5, 2017), <https://www.eia.gov/outlooks/archive/aeo17/> [hereinafter AEO 2017].

²⁶¹ 2024 Study Appendix A; *see also* 2024 LNG Export Study, *Appendix B: Domestic Energy, Economic, and GHG Assessment of U.S. LNG Exports*, at B-57-59.

²⁶² *See* AEO 2017, Table 62 (Natural Gas Imports and Exports), https://www.eia.gov/outlooks/aeo/data/browser/#/?id=76-AEO2017®ion=0-0&cases=ref_no_cpp&start=2015&end=2050&f=A&sourcekey=0. AEO 2017 included two versions of the Reference case—one with, and one without, the implementation of a rulemaking by the U.S. Environmental Protection Agency (EPA) called the Clean Power Plan. EPA repealed the Clean Power Plan in 2019. Therefore, we refer only to the AEO 2017 Reference case without the Clean Power Plan.

**Table 1: Year 2050 Reference Case Comparisons in AEO 2017
(Basis of 2018 LNG Export Study) and 2024 LNG Export Study**

	AEO 2017 Reference Case Without Clean Power Plan	2024 LNG Export Study – Defined Policies: Market Resolved Scenario
Lower-48 Dry Natural Gas Production (Bcf/d)	107.9	139.6
Total Natural Gas Consumption (Bcf/d)	92.4	80.3
Electric Power Sector Consumption (Bcf/d)	31.8	17.8
LNG Exports – Total (Bcf/d)	12.7	56.3
Henry Hub Spot Price (\$/MMBtu) ^(Note 1)	\$6.40 (2022\$)	\$4.62 (2022\$)

Note 1: Prices adjusted to 2022\$ with the AEO 2017 projection of a Gross Domestic Product price index.

For these reasons and those set forth in the Response to Comments, we find the 2024 LNG Export Study supports DOE’s finding that PALNG Phase II’s proposed exports will generate net economic benefits to the U.S. economy and will not be inconsistent with the public interest.

2. PALNG Phase II’s Application

Upon review, DOE finds that several factors identified in the uncontested Application support a grant of PALNG Phase II non-FTA authorization.

First, PALNG Phase II points to EIA data and projections in asserting that the United States has sufficient natural gas resources available to meet both projected future domestic needs

and demand for the proposed exports.²⁶³ We agree. In addition to the 2024 LNG Export Study, we take administrative notice of EIA’s recent authoritative projections, set forth in the *Annual Energy Outlook 2025* (AEO 2025),²⁶⁴ to evaluate current and future natural gas supply, demand, and prices. Specifically, DOE has assessed AEO 2025 to evaluate any differences from AEO 2023, which formed the basis for the 2024 LNG Export Study. We find that EIA’s projections in AEO 2025 continue to show market conditions that will accommodate increased exports of natural gas—well in excess of what is required to meet projected increases in domestic consumption.

Second, PALNG Phase II provides extensive uncontested evidence, drawn largely from the ICF Report submitted with the Application, of the various economic benefits to Texas and to the United States that will be generated by the construction and operation of the Expansion Project. For example, PALNG Phase II estimates that the Expansion Project will create an average of nearly 27,700 jobs for the U.S. economy per year from 2021 through 2046.²⁶⁵ Additionally, according to PALNG Phase II, the Expansion Project will increase tax revenues on both the state and federal level—including total government revenues in Texas of approximately \$140.2 million annually through 2046, for a cumulative impact on Texas government revenues of approximately \$3.6 billion.²⁶⁶

Third, we agree with PALNG Phase II that, over the term of the authorization, the proposed exports will make a positive contribution to the United States’ economy, including to the balance of trade. For instance, even beyond the multi-billion dollar economic investment and

²⁶³ See PALNG Phase II App. at 14.

²⁶⁴ U.S. Energy Info. Admin., *Annual Energy Outlook 2025* (Apr. 15, 2025), <https://www.eia.gov/outlooks/aeo/> [hereinafter AEO 2025].

²⁶⁵ PALNG Phase II App. at 30.

²⁶⁶ *Id.*

jobs created from constructing the proposed Expansion Project, DOE finds that a similar size project exporting at its peak capacity for one year (1.91 Bcf/d or 698 Bcf/yr) could reduce the trade deficit by up to approximately \$4.5 billion annually based on observed average U.S. LNG export prices for January through December 2024.²⁶⁷

Similarly, citing the ICF Report, PALNG Phase II asserts that the Expansion Project will generate an expected cumulative value of approximately \$77.3 billion of LNG exports over a projected 20-year export term, which “is estimated to reduce the U.S. balance of trade deficit by \$3.7 billion annually between 2026 and 2046, based on the value of LNG export volumes, liquids produced in association with incremental gas and other trade effects.”²⁶⁸ The cumulative value of PALNG Phase II’s exports would spur other domestic economic activity and benefits, including the potential for supporting upstream production and related employment.

In sum, based on the 2024 Study, the most recent data in AEO 2025, and evidence provided by PALNG Phase II, DOE finds that the market will be capable of sustaining the level of non-FTA exports requested in PALNG Phase II’s Application over the authorization term without negative economic impacts that overcome the economic benefits derived from such exports. We also find that PALNG Phase II’s requested non-FTA authorization is consistent with U.S. policy.

C. Non-Economic Issues

1. Energy Security

As PALNG Phase II points out, an efficient, transparent international market for natural gas with diverse sources of supply provides both economic and strategic benefits to the United

²⁶⁷ Specifically, the average 2024 price of \$6.41 per million cubic feet (Mcf) * 698 Bcf. *See* Natural Gas Monthly, Table 5, LNG Export Prices, at 19, https://www.eia.gov/naturalgas/monthly/pdf/table_05.pdf (Apr. 30, 2025). We note that this value could fluctuate based on U.S. LNG export prices, but the values would have been higher based on export prices in both 2023 (\$7.57/Mcf) and 2022 (\$12.24/Mcf).

²⁶⁸ PALNG Phase II App. at 31 (citing ICF Report).

States and our allies.²⁶⁹ For example, in light of the 2022 Russian invasion of Ukraine, there continue to be concerns about energy security for Europe and Central Asia, particularly given the relative share of Russian natural gas supplies into those regions until recently,²⁷⁰ with continued risk due to the now-expired volumes of Russian natural gas that supply Europe.²⁷¹ By authorizing exports of U.S.-sourced LNG to non-FTA countries, including to U.S. allies in Europe and elsewhere, this Order will enable PALNG Phase II to help mitigate energy security concerns once it begins exporting U.S. LNG.²⁷² More generally, to the extent U.S. exports diversify global LNG supplies and increase the volumes of destination-flexible LNG available globally, these exports will improve energy security for many U.S. allies and trading partners.²⁷³ We further note that, like all authorizations for the export of natural gas, no export will be permitted to any country for which exports are otherwise restricted by U.S. law or policy. For these reasons, we reiterate our finding that authorizing PALNG Phase II's exports of U.S.-sourced LNG to non-FTA countries will advance the public interest.

²⁶⁹ See *id.* (stating that “LNG exports will increasingly diversify the global supply of energy resources, which will support the geopolitical security interests of the United States by providing energy supply alternatives to its allies”).

²⁷⁰ According to EIA data, until immediately before Russia attacked Ukraine, natural gas imports delivered by pipeline into Europe provided most imported volumes into Europe, with imports sourced from Russia pre-2022 comprising the largest share. See U.S. Energy Info. Admin., *Today in Energy* (Feb. 11, 2022), <https://www.eia.gov/todayinenergy/detail.php?id=51258>.

²⁷¹ Reuters reports that the five-year agreement between Moscow and Kyiv for the transit of Russian natural gas to Europe via Ukraine expired on January 1, 2025, as Kyiv refused to renew a transit agreement extending or developing a new deal. See Reuters, *Russian gas era in Europe ends as Ukraine stops transit* (Jan. 1, 2025), <https://www.reuters.com/business/energy/russia-halts-gas-exports-europe-via-ukraine-2025-01-01/>.

²⁷² We note that Europe was the primary destination of U.S. LNG throughout 2023 and 2024. In December 2024, for example, more than 70% of all U.S. LNG exports went to Europe. See U.S. Dep’t of Energy, *Natural Gas Imports and Exports Monthly*, at 1 (Dec. 2024), https://www.energy.gov/sites/default/files/2025-02/Natural%20Gas%20Imports%20and%20Exports%20Monthly%20December%202024_2.pdf; see also U.S. Energy Info. Admin., *Today in Energy* (Apr. 15, 2024), <https://www.eia.gov/todayinenergy/detail.php?id=55920>, (noting that the United States supplied nearly half of Europe’s LNG imports in 2023).

²⁷³ As of February 2025, 19% of U.S. LNG exports have gone to FTA countries, and 81% have gone to non-FTA countries. See U.S. Dep’t of Energy, *Natural Gas Imports and Exports Monthly*, at 45 (Apr. 2025), https://www.energy.gov/sites/default/files/2025-04/Natural%20Gas%20Imports%20and%20Exports%20Monthly%20February%202025_0.pdf.

DOE also notes that, in the 2024 LNG Export Study, DOE projected continued high global demand for natural gas through 2050, demonstrating a need for additional LNG export facilities in the United States such as the Expansion Project.²⁷⁴ For example, DOE projected in its *Defined Policies: Market Resolved* scenario that U.S. natural gas production will increase 54%, up to 51.0 Tcf of natural gas, and LNG exports will increase to 20.5 Tcf, between 2020 and 2050.²⁷⁵ This level of LNG demand growth through to 2050 will require substantial investments in new natural gas and LNG projects.

Further, the United States has an increasingly important role in the European Union's (EU) natural gas supply. As the agreement allowing the transit of Russian natural gas through Ukraine expired at the end of 2024, "[i]ncreasing LNG imports from trustworthy global partners is key to fully eliminating the EU's reliance on Russian fossil fuels."²⁷⁶ According to the EU, "[e]ach step to phase out Russian fossil fuels brings the EU closer to a more secure and sustainable energy supply."²⁷⁷ In EIA's *International Energy Outlook 2023* (IEO 2023), EIA projected that "slow but increasing natural gas demand growth, coupled with the region's decreasing natural gas production, increases Western Europe's net natural gas imports by between 2.3 Tcf and 6.2 Tcf by 2050 across all cases."²⁷⁸ This analysis further supports a key objective of the "EU's energy union strategy," as "[LNG] can contribute to diversifying gas supplies, thus improving EU energy security in the short-term."²⁷⁹

²⁷⁴ See 2024 Study Appendix A, *supra* note 56, at A-17 – A-22.

²⁷⁵ 2024 Study Appendix B at B-57, https://www.energy.gov/sites/default/files/2024-12/LNGUpdate_AppendixB_Dec2024.pdf; 2024 Study Appendix A at A-22, https://www.energy.gov/sites/default/files/2024-12/LNGUpdate_AppendixA_Dec2024.pdf.

²⁷⁶ Official website of the European Union (Energy, LNG) (last accessed, 2025), https://energy.ec.europa.eu/topics/carbon-management-and-fossil-fuels/liquefied-natural-gas_en.

²⁷⁷ *Id.*

²⁷⁸ 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.

²⁷⁹ Official website of the European Union (Energy, LNG), *supra* note 276/276.

Additionally, we take administrative notice of a report published in October 2024 by the Institute of Energy Economics, Japan (IEEJ), which found that “[g]lobal LNG demand in 2050 is projected to increase by 74% from the present level.”²⁸⁰ According to the IEEJ, “[o]ne of the focal points of increasing demand is Southeast Asia’s emerging markets, notably the power generation sector,” and “[i]f the energy efficiency improvements assumed in these scenarios are not realised, LNG demand would increase further.”²⁸¹ Similarly, other forecasts project varying levels of global demand for LNG, with many analysts predicting moderate to significant growth in LNG demand globally, particularly driven by Asia.

In light of these benefits to U.S. and global energy security, we find that PALNG Phase II’s requested exports will advance the public interest for reasons that are distinct from and additional to the benefits discussed above.

2. Significance of the 2024 LNG Export Study on Non-Economic Issues

In addition to evaluating economic and energy security issues related to LNG exports, the 2024 LNG Export Study evaluated GHG emissions and environmental effects associated with upstream natural gas production, processing, and transportation.

As explained above, DOE used a consequential life cycle analysis (or LCA) in the 2024 Study to estimate the direct and indirect market effects of additional U.S. LNG exports to better understand their effect on global GHG emissions. However, upon review of the public comments and supporting documentation, DOE concluded that “market effects, such as changes in energy demand and the sources used to meet that demand, ultimately determine the consequences of U.S. LNG exports on global GHG emissions.”²⁸² DOE noted, for example, that

²⁸⁰ The Institute of Energy Economics, Japan, IEEJ 2025 Outlook (Oct. 18, 2024), <https://eneken.ieej.or.jp/data/12114.pdf>.

²⁸¹ *Id.*

²⁸² Response to Comments at 49.

increased U.S. exports of LNG are more likely to displace other sources of natural gas, along with coal and oil, than to replace renewable energy.²⁸³

Specifically, DOE found that increased U.S. LNG exports in the global market may contribute to increased global GHG emissions, but that “the cumulative increase in global GHG emissions to 2050 would be no greater than 0.1%” across all scenarios evaluated in the 2024 Study—even if U.S. LNG exports more than triple from current levels (to 56.3 Bcf/d of natural gas).²⁸⁴ Given the uncertainties inherent in modeling the global energy system, DOE thus “cannot conclude that the change in GHG emissions would be significantly different from zero.”²⁸⁵ Accordingly, DOE finds that the GHG emissions discussed in the 2024 Study proceeding do not affect DOE’s review of PALNG Phase II’s Application under NGA section 3(a).²⁸⁶

Turning to environmental effects beyond GHG emissions, the 2024 LNG Export Study included a literature review “of the effects of upstream, midstream, and downstream natural gas production, transportation, and exports on the environment and on local communities,” known as the Addendum on Environmental and Community Effects of U.S. LNG Exports (Appendix D). DOE found that there are potential environmental effects associated with upstream natural gas production, processing, and transportation that need to be carefully managed.²⁸⁷ Recognizing that its jurisdiction under NGA section 3(a) is limited, however, DOE concluded that these environmental effects could be addressed by local, state, and federal agencies that have authority

²⁸³ *Id.*

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ *See id.* (stating that, because “there could be no change or even a reduction” in GHG emissions due to increased levels of U.S. LNG exports, “the GHG emissions discussed in the Study are not expected to affect DOE’s public interest determination in pending or future non-FTA authorizations”).

²⁸⁷ *Id.*

to balance the benefits and burdens of natural gas production, transport, and liquefaction.²⁸⁸

Specifically, DOE believes the public interest may be served by addressing these environmental concerns through federal, state, or local regulation, but that DOE lacks the authority to attempt to regulate in these areas indirectly through NGA section 3(a).

Indeed, DOE has long observed—and reaffirmed in the Response to Comments on the 2024 Study—that such environmental concerns do not lead DOE to conclude that non-FTA exports should be prohibited. A denial of non-FTA export applications under NGA section 3(a), including PALNG Phase II’s Application in this proceeding, would be too blunt an instrument to address these environmental concerns.²⁸⁹ Moreover, such a finding would cause the United States to forego entirely the economic and international benefits discussed herein. Based on this evidence, DOE concludes that the environmental effects associated with natural gas production do not establish that PALNG Phase II’s requested exports of LNG to non-FTA nations are inconsistent with the public interest.

3. Issuance of NEPA Categorical Exclusion

DOE’s NEPA procedures provide for a categorical exclusion for actions that normally do not require preparation of either an EIS or an EA —specifically, categorical exclusion B5.7 (10 C.F.R. Part 1021, Subpart D, Appendix B5), *Export of natural gas and associated transportation by marine vessel*.²⁹⁰ On May 27, 2025, DOE issued a categorical exclusion for the non-FTA portion of PALNG Phase II’s Application under this provision.²⁹¹

²⁸⁸ Response to Comments at 49-50.

²⁸⁹ *Id.* at 50; *see also Sierra Club I*, 867 F.3d at 203.

²⁹⁰ *See* 10 C.F.R. Part 1021, Subpt. D, App. B, Categorical Exclusion B5.7. This categorical exclusion amended the prior B5.7 categorical exclusion. *See* U.S. Dep’t of Energy, National Environmental Policy Act Implementing Procedures; Final Rule, 85 Fed. Reg. 78,197 (Dec. 4, 2020); *see also supra* § II.C.

²⁹¹ U.S. Dep’t of Energy, Categorical Exclusion Determination, Port Arthur LNG Phase II, LLC, Docket No. 20-23-LNG (May 27, 2025).

4. Other Considerations

DOE notes the continuing uncertainty that all or even most of the proposed LNG export projects will ever be realized because of the time, difficulty, and expense of commercializing, financing, and constructing LNG export terminals, as well as the uncertainties and competition inherent in the global market for LNG.²⁹²

More generally, DOE continues to subscribe to the principle set forth in the 1984 Policy Guidelines that, under most circumstances, the market is the most efficient means of allocating natural gas supplies.²⁹³ However, agency intervention may be necessary to protect the public in the event there is insufficient domestic natural gas for domestic use, or as a result of other facts or circumstances beyond those presented here.²⁹⁴

D. Conclusion

Upon review of the record evidence and relevant precedent in earlier non-FTA export decisions, DOE has not found an adequate basis to conclude that PALNG Phase II's proposed exports of U.S. LNG to non-FTA countries will be inconsistent with the public interest.

With the issuance of this Order and the vacatur or expiration of previous long-term non-FTA export authorizations,²⁹⁵ there are currently 42 non-FTA authorizations from the lower-48

²⁹² See *infra* § VIII.E (identifying long-term orders vacated to date).

²⁹³ 1984 Policy Guidelines, 49 Fed. Reg. at 6684.

²⁹⁴ In previous orders, some commenters asked DOE to clarify the circumstances under which the agency would exercise its authority to revoke (in whole or in part) final LNG export authorizations. DOE stated that it could not precisely identify all the circumstances under which such action might be considered. Subsequently, in 2018, DOE issued a policy statement addressing this issue. See U.S. Dep't of Energy, Policy Statement Regarding Long-Term Authorizations to Export Natural Gas to Non-Free Trade Agreement Countries, 83 Fed. Reg. 28,841 (June 21, 2018).

²⁹⁵ To date, DOE has vacated nine long-term non-FTA authorizations (none over the objection of the authorization holder) in the following proceedings: *Eagle LNG Partners Jacksonville II LLC*, Docket No. 17-79-LNG (Mar. 12, 2023), *Bear Head Energy Inc. (formerly Bear Head LNG Corp.) and Bear Head LNG (USA), LLC*, Docket No. 15-33-LNG (Jan. 20, 2023); *Jordan Cove Energy Project L.P.*, Docket No. 12-32-LNG (Apr. 22, 2022); *Air Flow N. Am. Corp.*, Docket No. 14-206-LNG (Dec. 30, 2021); *Emera CNG, LLC*, Docket No. 13-157-CNG (Oct. 20, 2021); *Annova LNG Common Infrastructure, LLC*, Docket No. 19-34-LNG (Apr. 23, 2021); *Floridian Natural Gas Storage Co., LLC*, Docket No. 15-38-LNG (Oct. 22, 2020); *Carib Energy (USA) LLC*, Docket No. 11-141-LNG (Nov. 17,

states (two conditional orders and 40 final orders, including this Order) in a cumulative volume of exports totaling 52.75 Bcf/d of natural gas, or approximately 19.3 trillion cubic feet per year, as follows:²⁹⁶ Sabine Pass Liquefaction, LLC (2.2 Bcf/d),²⁹⁷ Cameron LNG, LLC (1.7 Bcf/d),²⁹⁸ FLEX I (1.4 Bcf/d),²⁹⁹ FLEX II (0.4 Bcf/d),³⁰⁰ Cove Point LNG, LP (0.77 Bcf/d),³⁰¹ Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC (2.1 Bcf/d),³⁰² Sabine Pass Liquefaction, LLC Expansion Project (1.38 Bcf/d),³⁰³ American LNG Marketing LLC (0.008 Bcf/d),³⁰⁴ Sabine

2020); *Flint Hills Res., LP*, Docket No. 15-168-LNG (Feb. 5, 2019). Additionally, two long-term non-FTA authorizations in the following proceedings have expired: *Pieridae Energy (USA) Ltd.*, Docket No. 14-179-LNG (Jan. 17, 2025); *Magnolia LNG, LLC*, Docket No. 13-132-LNG (Dec. 8, 2023).

²⁹⁶ Subsequent amendments to each order, where applicable, are omitted. Any number discrepancies are due to rounding. Additionally, this cumulative volume of non-FTA exports from the lower-48 states does not include export volumes granted pursuant to DOE's regulations for small-scale exports of natural gas. See 10 C.F.R. §§ 590.102(p), 208(a); U.S. Dep't of Energy, Office of Fossil Energy and Carbon Management, Long Term Applications Received by DOE to Export Domestically Produced LNG, CNG, CGL from the Lower-48 States, at 14 (as of Jan. 22, 2025), <https://www.energy.gov/fecm/articles/summary-lng-export-applications-lower-48-states> (identifying small-scale applications and status).

²⁹⁷ *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961-A, Docket No. 10-111-LNG, Final Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas from Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations (Aug. 7, 2012).

²⁹⁸ *Cameron LNG, LLC*, DOE/FE Order No. 3391-A, Docket No. 11-162-LNG, Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Cameron LNG Terminal in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations (Sept. 10, 2014).

²⁹⁹ *Freeport LNG Expansion, L.P., et al.*, DOE/FE Order No. 3282-C, Docket No. 10-161-LNG, Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas, to Non-Free Trade Agreement Nations (Nov. 14, 2014) (FLEX I Final Order).

³⁰⁰ *Freeport LNG Expansion, L.P., et al.*, DOE/FE Order No. 3357-B, Docket No. 11-161-LNG, Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas, to Non-Free Trade Agreement Nations (Nov. 14, 2014) (FLEX II Final Order).

³⁰¹ *Cove Point LNG, LP*, DOE/FE Order No. 3331-A, Docket No. 11-128-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Cove Point LNG Terminal in Calvert County, Maryland, to Non-Free Trade Agreement Nations (May 7, 2015).

³⁰² *Cheniere Mktg., LLC and Corpus Christi Liquefaction, LLC*, DOE/FE Order No. 3638, Docket No. 12-97-LNG, Final Order and Opinion Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Proposed Corpus Christi Liquefaction Project to Be Located in Corpus Christi, Texas, to Non-Free Trade Agreement Nations (May 12, 2015).

³⁰³ *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 3669, Docket Nos. 13-30-LNG, 13-42-LNG, & 13-121-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Sabine Pass LNG Terminal Located in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations (June 26, 2015).

³⁰⁴ *Am. LNG Mktg. LLC*, DOE/FE Order No. 3690, Docket No. 14-209-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas in ISO Containers Loaded at the Proposed Hialeah Facility Near Medley, Florida, and Exported by Vessel to Non-Free Trade Agreement Nations (Aug. 7, 2015).

Pass Liquefaction, LLC Design Increase (0.56 Bcf/d),³⁰⁵ Cameron LNG, LLC Design Increase (0.42 Bcf/d),³⁰⁶ Cameron LNG, LLC Expansion Project (1.41 Bcf/d),³⁰⁷ Lake Charles Exports, LLC (2.0 Bcf/d),³⁰⁸ Lake Charles LNG Export Company, LLC,³⁰⁹ Carib Energy (USA), LLC (0.004),³¹⁰ Southern LNG Company, L.L.C. (0.36 Bcf/d),³¹¹ the FLEX Design Increase (0.34 Bcf/d),³¹² Golden Pass LNG Terminal LLC (2.57 Bcf/d),³¹³ Delfin LNG LLC (1.8 Bcf/d),³¹⁴ the Lake Charles LNG Export Company, LLC Design Increase (0.33 Bcf/d),³¹⁵ the Lake Charles

³⁰⁵ *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 3792, Docket No. 15-63-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Sabine Pass LNG Terminal Located in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations (Mar. 11, 2016).

³⁰⁶ *Cameron LNG, LLC*, DOE/FE Order No. 3797, Docket No. 15-67-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Cameron Terminal Located in Cameron and Calcasieu Parishes, Louisiana, to Non-Free Trade Agreement Nations (Mar. 18, 2016).

³⁰⁷ *Cameron LNG, LLC*, DOE/FE Order No. 3846, Docket No. 15-90-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from Trains 4 and 5 of the Cameron LNG Terminal Located in Cameron and Calcasieu Parishes, Louisiana, to Non-Free Trade Agreement Nations (July 15, 2016).

³⁰⁸ *Lake Charles Exports, LLC*, DOE/FE Order No. 3324-A, Docket No. 11-59-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Lake Charles Terminal in Calcasieu Parish, Louisiana, to Non-Free Trade Agreement Nations (July 29, 2016).

³⁰⁹ *Lake Charles LNG Export Co., LLC*, DOE/FE Order No. 3868, Docket No. 13-04-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Lake Charles Terminal in Calcasieu Parish, Louisiana to Non-Free Trade Agreement Nations (July 29, 2016).

³¹⁰ *Carib Energy (USA) LLC*, DOE/FE Order No. 3937, Docket No. 16-98-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas in ISO Containers Loaded at Designated Pivotal LNG, Inc. Facilities and Exported by Vessel to Non-Free Trade Agreement Nations in Central America, South America, or the Caribbean (Nov. 28, 2016).

³¹¹ *S. LNG Co., L.L.C.*, DOE/FE Order No. 3956, Docket No. 12-100-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Elba Island Terminal in Chatham County, Georgia, to Non-Free Trade Agreement Nations (Dec. 16, 2016).

³¹² *Freeport LNG Expansion, L.P., et al.*, DOE/FE Order No. 3957, Docket No. 16-108-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas, to Non-Free Trade Agreement Nations (Dec. 19, 2016).

³¹³ *Golden Pass LNG Terminal LLC (formerly Golden Pass Products LLC)*, DOE/FE Order No. 3978, Docket No. 12-156-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Golden Pass LNG Terminal Located in Jefferson County, Texas, to Non-Free Trade Agreement Nations (Apr. 25, 2017).

³¹⁴ *Delfin LNG LLC*, DOE/FE Order No. 4028, Docket No. 13-147-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from a Proposed Floating Liquefaction Project and Deepwater Port 30 Miles Offshore of Louisiana to Non-Free Trade Agreement Nations (June 1, 2017).

³¹⁵ *Lake Charles LNG Export Co., LLC*, DOE/FE Order No. 4010, Docket No. 16-109-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Lake Charles Terminal in Lake Charles, Louisiana, to Free Trade Agreement and Non-Free Trade Agreement Nations (June 29, 2017).

Exports, LLC Design Increase,³¹⁶ Mexico Pacific Limited LLC (1.7 Bcf/d),³¹⁷ Venture Global Calcasieu Pass, LLC (1.7 Bcf/d),³¹⁸ ECA Liquefaction, S. de R.L. de C.V. (Mid-Scale Project) (0.44 Bcf/d),³¹⁹ Energía Costa Azul, S. de R.L. de C.V. (Large-Scale Project) (1.74 Bcf/d),³²⁰ Port Arthur LNG, LLC (1.91 Bcf/d),³²¹ Louisiana LNG Infrastructure LLC (formerly Driftwood LNG LLC) (3.88 Bcf/d),³²² FLEX4 (0.72 Bcf/d),³²³ Gulf LNG Liquefaction Company, LLC (1.53 Bcf/d),³²⁴ Eagle LNG Partners Jacksonville LLC (0.14 Bcf/d),³²⁵ Venture Global Plaquemines LNG, LLC (3.40 Bcf/d),³²⁶ Texas LNG Brownsville LLC (0.56 Bcf/d),³²⁷ Corpus

³¹⁶ *Lake Charles Exports, LLC*, DOE/FE Order No. 4011, Docket No. 16-110-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Lake Charles Terminal in Lake Charles, Louisiana, to Free Trade Agreement and Non-Free Trade Agreement Nations (June 29, 2017).

³¹⁷ *Mexico Pac. Ltd. LLC*, DOE/FE Order No. 4312, Docket No. 18-70-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export U.S.-Sourced Natural Gas by Pipeline to Mexico for Liquefaction and Re-Export in the Form of Liquefied Natural Gas to Non-Free Trade Agreement Countries (Dec. 14, 2018).

³¹⁸ *Venture Global Calcasieu Pass, LLC*, DOE/FE Order No. 4346, Docket Nos. 13-69-LNG, 14-88-LNG, 15-25-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Mar. 5, 2019).

³¹⁹ *ECA Liquefaction, S. de R.L. de C.V.*, DOE/FE Order No. 4364, Docket No. 18-144-LNG, Opinion and Order Granting Long-Term Authorization to Re-Export U.S.-Sourced Natural Gas in the Form of Liquefied Natural Gas from Mexico to Non-Free Trade Agreement Countries (ECA Mid-Scale Project) (Mar. 29, 2019).

³²⁰ *Energía Costa Azul, S. de R.L. de C.V.*, DOE/FE Order No. 4365, Docket No. 18-145-LNG, Opinion and Order Granting Long-Term Authorization to Re-Export U.S.-Sourced Natural Gas in the Form of Liquefied Natural Gas from Mexico to Non-Free Trade Agreement Countries (ECA Large-Scale Project) (Mar. 29, 2019).

³²¹ *Port Arthur LNG, LLC*, DOE/FE Order No. 4372, Docket No. 15-96-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (May 2, 2019).

³²² *Louisiana LNG Infrastructure LLC (formerly Driftwood LNG LLC)*, DOE/FE Order No. 4373, Docket No. 16-144-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (May 2, 2019).

³²³ *Freeport LNG Expansion, L.P., et al.*, DOE/FE Order No. 4374, Docket No. 18-26-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (May 28, 2019).

³²⁴ *Gulf LNG Liquefaction Co., LLC*, DOE/FE Order No. 4410, Docket No. 12-101-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (July 31, 2019).

³²⁵ *Eagle LNG Partners Jacksonville LLC*, DOE/FE Order No. 4445, Docket No. 16-15-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Oct. 3, 2019).

³²⁶ *Venture Global Plaquemines LNG, LLC*, DOE/FE Order No. 4446, Docket No. 16-28-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Oct. 16, 2019).

³²⁷ *Texas LNG Brownsville LLC*, DOE/FE Order No. 4489, Docket No. 15-62-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Feb. 10, 2020).

Christi Liquefaction, LLC (formerly Corpus Christi Liquefaction Stage III, LLC) (1.59 Bcf/d),³²⁸ Rio Grande LNG, LLC (3.61 Bcf/d),³²⁹ Epsilon LNG LLC (1.083 Bcf/d),³³⁰ Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC (0.3 Bcf/d),³³¹ Sabine Pass Liquefaction, LLC (0.42 Bcf/d),³³² Vista Pacifico LNG, S.A.P.I. de C.V. (Mid-Scale Project) (0.55 Bcf/d),³³³ FLEX Design Increase (0.24 Bcf/d),³³⁴ NFE Altamira FLNG, S. de R.L. de C.V. (0.40 Bcf/d),³³⁵ Commonwealth LNG, LLC (conditional authorization of 1.21 Bcf/d),³³⁶ Venture Global CP2 LNG, LLC (conditional authorization of 3.96 Bcf/d),³³⁷ and this Order.

We note that the volumes authorized for export in the *Lake Charles Exports* and *Lake Charles LNG Export* orders are both 2.0 Bcf/d and 0.33 Bcf/d, respectively, yet are not additive to one another because the source of LNG approved under all of those orders is the Lake Charles

³²⁸ *Corpus Christi Liquefaction, LLC (formerly Corpus Christi Liquefaction Stage III, LLC)*, DOE/FE Order No. 4490, Docket No. 18-78-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Feb. 10, 2020).

³²⁹ *Rio Grande LNG, LLC*, DOE/FE Order No. 4492, Docket No. 15-190-LNG, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Feb. 10, 2020).

³³⁰ *Epsilon LNG LLC*, DOE/FE Order No. 4629, Docket No. 20-31-LNG, Opinion and Order Granting Long-Term Authorization to Export Natural Gas to Mexico for Liquefaction, and to Re-Export U.S. Sourced Natural Gas in the Form of Liquefied Natural Gas from Mexico to Free Trade Agreement and Non-Free Trade Agreement Nations (Dec. 8, 2020).

³³¹ *Cheniere Mktg., LLC and Corpus Christi Liquefaction, LLC*, DOE/FECM Order No. 4799, Docket No. 19-124-LNG, Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Mar. 16, 2022).

³³² *Sabine Pass Liquefaction, LLC*, DOE/FECM Order No. 4800, Docket No. 19-125-LNG, Order Granting Long Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Mar. 16, 2022).

³³³ *Vista Pacifico LNG, S.A.P.I. de C.V.*, DOE/FECM Order No. 4929, Docket No. 20-153-LNG, Opinion and Order Granting Long-Term Authorization to Re-Export U.S.-Sourced Natural Gas in the Form of Liquefied Natural Gas from Mexico to Non-Free Trade Agreement Nations (Dec. 20, 2022).

³³⁴ *Freeport LNG Expansion, L.P., et al.*, DOE/FECM Order No. 4961, Docket No. 21-98-LNG, Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Mar. 3, 2023).

³³⁵ *NFE Altamira FLNG, S. de R.L. de C.V.*, DOE/FECM Order No. 5156, Docket No. 22-110-LNG, Order Granting Long-Term Authorization to Re-Export U.S.-Sourced Natural Gas in the Form of Liquefied Natural Gas from Mexico to Non-Free Trade Agreement Nations (Aug. 31, 2024).

³³⁶ *Commonwealth LNG, LLC*, DOE/FECM Order No. 5238, Docket No. 19-134-LNG, Order Conditionally Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Feb. 14, 2025).

³³⁷ *Venture Global CP2 LNG, LLC*, DOE/FECM Order No. 5264, Docket No. 21-131-LNG, Order Conditionally Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations (Mar. 19, 2025).

Terminal.³³⁸

DOE further notes that, to date, the cumulative total of U.S. and Mexico LNG export capacity, using U.S.-sourced natural gas, that is operating or under construction across 14 mid- or large-scale export projects with a non-FTA export authorization from DOE is 29.02 Bcf/d of natural gas.³³⁹

DOE will continue taking a measured approach in reviewing the other pending applications to export natural gas. Specifically, DOE will continue to assess the cumulative impacts of each succeeding request for export authorization on the public interest with due regard to the effect on domestic natural gas supply and demand fundamentals.

Two reasons support this approach. First, the 2024 LNG Export Study, like any study based on assumptions and economic projections, is inherently limited in its predictive accuracy. Second, the market for natural gas has experienced changes due to economic, geopolitical, technological, and regulatory developments. The market of the future very likely will not resemble the market of today. In recognition of these factors, DOE intends to monitor developments that could potentially undermine the public interest in grants of successive applications for exports of domestically produced LNG and to attach terms and conditions to LNG export authorizations to protect the public interest.

³³⁸ *Lake Charles LNG Export Co., LLC*, DOE/FE Order No. 4010, at 55; *see also Lake Charles Exports, LLC*, DOE/FE Order No. 4011, at 54.

³³⁹ U.S. Dep't of Energy, Liquefied Natural Gas (LNG) Exports Snapshot (Mar. 2025), <https://www.energy.gov/sites/default/files/2025-04/LNG%20Snapshot%20Mar%2031%202025.pdf> (total of 29.02 Bcf/d calculated by adding Columns "Under Construction Pursuant to FID" & "Operating," plus an additional 2.33 Bcf/d for Louisiana LNG Infrastructure reaching FID on 4/29/25, https://www.woodside.com/docs/default-source/asx-announcements/2025/028-woodside-approves-louisiana-lng-development.pdf?sfvrsn=461ba43c_3).

IX. FINDINGS

On the basis of the findings and conclusions set forth above, DOE grants the non-FTA portion of PALNG Phase II's Application, as amended, subject to the Terms and Conditions and Ordering Paragraphs set forth below.

X. TERMS AND CONDITIONS

A. Term of the Authorization

PALNG Phase II requests its export authorization for a term “commencing on the earlier of the date of first export or seven years from the date of issuance of the authorization[]” and “terminating on the later of the date that is twenty years from the date of the commencement of the term or December 31, 2050.”³⁴⁰ Consistent with DOE's current practice, DOE will grant PALNG Phase II's authorization for a term to commence on the date of first export from the proposed Expansion Project and to extend through December 31, 2050.³⁴¹

B. Commencement of Operations Within Seven Years

Consistent with DOE's non-FTA authorizations to date and PALNG Phase II's request, DOE adds as a condition of this authorization that PALNG Phase II must commence exports from the Expansion Project no later than seven years from the date of issuance of this Order. The purpose of this condition is to ensure that other entities that may seek similar authorizations are not frustrated in their efforts to obtain those authorizations by authorization holders that are not engaged in actual export operations.

³⁴⁰ PALNG Phase II App. at 4.

³⁴¹ See 2050 Policy Statement, *supra* note 13, 85 Fed. Reg. at 52,247 (establishing that “[f]uture long-term non-FTA export authorizations ... will have a standard export term lasting through December 31, 2050, unless a shorter term is requested by the applicant.”). Here, we find that the standard non-FTA export term ending on December 31, 2050, is appropriate because PALNG Phase II's alternate request—20 years “from the date of the commencement of the term”—would end on a date after December 31, 2050, as the Expansion Project is not yet constructed and thus exports have not commenced.

C. Transfer, Assignment, or Change in Control

DOE's natural gas regulations prohibit authorization holders from transferring or assigning authorizations to import or export natural gas without specific authorization by the Assistant Secretary for Fossil Energy and Carbon Management.³⁴² DOE has found that this requirement applies to any change of control of the authorization holder. This condition was deemed necessary to ensure that DOE will be given an adequate opportunity to assess the public interest impacts of such a transfer or change.

DOE construes a change in control to mean a change, directly or indirectly, of the power to direct the management or policies of an entity whether such power is exercised through one or more intermediary companies or pursuant to an agreement, written or oral, and whether such power is established through ownership or voting of securities, or common directors, officers, or stockholders, or voting trusts, holding trusts, or debt holdings, or contract, or any other direct or indirect means.³⁴³ A rebuttable presumption that control exists will arise from the ownership or the power to vote, directly or indirectly, 10% or more of the voting securities of such entity.³⁴⁴

D. Agency Rights

PALNG Phase II requests authorization to export LNG on its own behalf and as agent for other entities that hold title to the LNG at the time of export, pursuant to long-term contracts. DOE previously has determined that, in LNG export orders in which Agency Rights have been granted, DOE shall require registration materials filed for, or by, a LNG title-holder (Registrant) to include the same company identification information and long-term contract information of

³⁴² 10 C.F.R. § 590.405.

³⁴³ See U.S. Dep't of Energy, Procedures for Changes in Control Affecting Applications and Authorizations to Import or Export Natural Gas, 79 Fed. Reg. 65,541, 65,542 (Nov. 5, 2014).

³⁴⁴ See *id.*

the Registrant as if the Registrant had filed an application to export LNG on its own behalf.³⁴⁵

To ensure that the public interest is served, this authorization will require that, where PALNG Phase II proposes to export LNG as agent for other entities that hold title to the LNG (Registrants), PALNG Phase II must register those entities with DOE in accordance with the procedures and requirements described herein.

E. Contract Provisions for the Sale or Transfer of LNG

DOE will require that PALNG Phase II file or cause to be filed with DOE any relevant long-term commercial agreements pursuant to which PALNG Phase II exports LNG on its own behalf or as agent for a Registrant. DOE finds that the submission of all such agreements or contracts within 30 days of their execution using the procedures described below will be consistent with the “to the extent practicable” requirement of section 590.202(b).³⁴⁶

In addition, DOE finds that section 590.202(c) of DOE’s regulations³⁴⁷ requires that PALNG Phase II file, or cause to be filed, all long-term contracts associated with the long-term supply of natural gas to the Expansion Project, whether signed by PALNG Phase II or the Registrant, within 30 days of their execution.

DOE recognizes that some information in PALNG Phase II’s or a Registrant’s long-term commercial agreements associated with the export of LNG, and/or long-term contracts associated with the long-term supply of natural gas to the Expansion Project, may be commercially sensitive. DOE therefore will provide PALNG Phase II the option to file or cause

³⁴⁵ See, e.g., *Cameron LNG, LLC*, DOE/FE Order No. 3846, Docket No. 15-90-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from Trains 4 and 5 of the Cameron LNG Terminal to Non-Free Trade Agreement Nations, at 128-29 (July 15, 2016); *Freeport LNG Expansion, L.P., et al.*, DOE/FE Order No. 2913, Docket No. 10-160-LNG, Order Granting Long-Term Authorization to Export Liquefied Natural Gas from the Freeport LNG Terminal to Free Trade Agreement Nations, at 7-8 (Feb. 10, 2011).

³⁴⁶ 10 C.F.R. § 590.202(b).

³⁴⁷ *Id.* § 590.202(c).

to be filed either unredacted contracts, or in the alternative: (A) PALNG Phase II may file, or cause to be filed, long-term contracts under seal, but it also will file either: (i) a copy of each long-term contract with commercially sensitive information redacted, or (ii) a summary of all major provisions of the contract(s) including, but not limited to, the parties to each contract, contract term, quantity, any take or pay or equivalent provisions/conditions, destination, re-sale provisions, and other relevant provisions; and (B) the filing must demonstrate why the redacted or non-disclosed information should be exempted from public disclosure.

To ensure that DOE destination and reporting requirements included in this Order are conveyed to subsequent title holders, DOE will include as a condition of this authorization that future contracts for the sale or transfer of LNG exported pursuant to this Order shall include an acknowledgement of these requirements.

F. Export Quantity

This Order grants PALNG Phase II's Application to export LNG to non-FTA countries in the full volume requested, equivalent to 698 Bcf/yr of natural gas.

G. Combined FTA and Non-FTA Export Authorization Volumes

PALNG Phase II is currently authorized in DOE/FE Order No. 4562 to export domestically produced LNG from the Expansion Project to FTA countries in a volume equivalent to 698 Bcf/yr of natural gas. Because the source of LNG for that FTA Order and this Order reflect the planned liquefaction capacity of the Expansion Project, PALNG Phase II may not treat the FTA and non-FTA export volumes as additive to one another.

However, this approved volume is additive to the volume authorized for export from the Base Project by Port Arthur LNG, LLC to FTA countries in DOE/FE Order No. 3698-A (Docket Nos. 15-53-LNG and 18-162-LNG) and to non-FTA countries in DOE/FE Order No. 4372 (Docket No. 15-96-LNG), which is 698 Bcf/yr—for a total authorized export volume of 1,396

Bcf/yr from the Port Arthur LNG terminal (the Base and Expansion Projects) to FTA and non-FTA countries on a non-additive basis.³⁴⁸

XI. ORDER

Pursuant to section 3 of the Natural Gas Act, it is ordered that:

A. Port Arthur LNG Phase II, LLC (PALNG Phase II) is authorized to export domestically produced LNG by vessel from Trains 3 and 4 (the Expansion Project), to be built at the proposed Port Arthur LNG terminal to be located in Jefferson County, Texas. The volume authorized in this Order is equivalent to 698 Bcf/yr of natural gas for a term to commence on the date of first export and to extend through December 31, 2050. PALNG Phase II is authorized to export this LNG on its own behalf and as agent for other entities that hold title to the natural gas, pursuant to one or more contracts of any duration.³⁴⁹

B. This LNG may be exported to any country with which the United States does not have a FTA requiring national treatment for trade in natural gas, which currently has or in the future develops the capacity to import LNG, and with which trade is not prohibited by U.S. law or policy.

C. PALNG Phase II must commence export operations using the planned Expansion Project no later than seven years from the date of issuance of this Order.

D. PALNG Phase II shall ensure that all transactions authorized by this Order are permitted and lawful under U.S. laws and policies, including the rules, regulations, orders, policies, and other determinations of the Office of Foreign Assets Control of the U.S.

Department of the Treasury. Failure to comply with these requirements could result in rescission

³⁴⁸ See *infra* at Appendix.

³⁴⁹ See U.S. Dep't of Energy, Including Short-Term Export Authority in Long-Term Authorizations for the Export of Natural Gas on a Non-Additive Basis, 86 Fed. Reg. 2243 (Jan. 12, 2021).

of this authorization and/or other civil or criminal penalties.

E. This Order is conditioned on PALNG Phase II's ongoing compliance with any other preventative and mitigative measures at the Expansion Project imposed by federal or state agencies.

F. (i) PALNG Phase II shall file, or cause others to file, with the U.S. Department of Energy, Office of Fossil Energy and Carbon Management, Office of Resource Sustainability, Office of Regulation, Analysis, and Engagement (FE-34) a non-redacted copy of all executed long-term contracts associated with the long-term export of LNG from the Expansion Project on its own behalf or as agent for other entities. The non-redacted copies must be filed within 30 days of their execution and may be filed under seal, as described above.

(ii) PALNG Phase II shall file, or cause others to file, with the Office of Regulation, Analysis, and Engagement a non-redacted copy of all executed long-term contracts associated with the long-term supply of natural gas to the Expansion Project. The non-redacted copies must be filed within 30 days of their execution and may be filed under seal, as described above.

G. PALNG Phase II is permitted to use its authorization to export LNG as agent for other LNG title-holders (Registrants), after registering those entities with DOE. Registration materials shall include an agreement by the Registrant to supply PALNG Phase II with all information necessary to permit PALNG Phase II to register that person or entity with DOE, including: (1) the Registrant's agreement to comply with this Order and all applicable requirements of DOE's regulations at 10 C.F.R. Part 590, including but not limited to destination restrictions; (2) the exact legal name of the Registrant, state/location of incorporation/registration, primary place of doing business, and the Registrant's ownership structure, including the ultimate parent entity if the Registrant is a subsidiary or affiliate of another entity; (3) the name, title, mailing address, e-

mail address, and telephone number of a corporate officer or employee of the Registrant to whom inquiries may be directed; and (4) within 30 days of execution, a copy of any long-term contracts not previously filed with DOE, described in Ordering Paragraph F of this Order.

Any change in the registration materials—including changes in company name, contact information, length of the long-term contract, termination of the long-term contract, or other relevant modification—shall be filed with DOE within 30 days of such change(s).

H. PALNG Phase II, or others for whom PALNG Phase II acts as agent, shall include the following provision in any agreement or other contract for the sale or transfer of LNG exported pursuant to this Order:

Customer or purchaser acknowledges and agrees that it will resell or transfer LNG purchased hereunder for delivery only to countries identified in Ordering Paragraph B of DOE/FECM Order No. 5292, issued May 29, 2025, in Docket No. 20-23-LNG, and/or to purchasers that have agreed in writing to limit their direct or indirect resale or transfer of such LNG to such countries. Customer or purchaser further commits to cause a report to be provided to Port Arthur LNG Phase II, LLC that identifies the country (or countries) into which the LNG was actually delivered, and to include in any resale contract for such LNG the necessary conditions to ensure that Port Arthur LNG Phase II, LLC is made aware of all such actual destination countries.

I. Within two weeks after the first export authorized in Ordering Paragraph A occurs, PALNG Phase II shall provide written notification of the date of first export to DOE.

J. PALNG Phase II shall file with the Office of Regulation, Analysis, and Engagement, on a semi-annual basis, written reports describing the status of the proposed Expansion Project. The reports shall be filed on or by April 1 and October 1 of each year, and shall include information on the status of the Expansion Project, the date the Expansion Project is expected to commence exports of LNG, and the status of any associated long-term supply and export contracts.

K. With respect to any change in control of the authorization holder, PALNG Phase II must comply with DOE's Procedures for Change in Control Affecting Applications and Authorizations to Import or Export Natural Gas.³⁵⁰

L. Monthly Reports: With respect to the exports authorized by this Order, PALNG Phase II shall file with the Office of Regulation, Analysis, and Engagement, within 30 days following the last day of each calendar month, a report on Form FE-746R indicating whether exports have been made. The first monthly report required by this Order is due not later than the 30th day of the month following the month of first export. In subsequent months, if exports have not occurred, a report of "no activity" for that month must be filed. If exports have occurred, the report must provide the information specified for each applicable activity and mode of transportation, as set forth in the Guidelines for Filing Monthly Reports. These Guidelines are available at <https://www.energy.gov/fecm/guidelines-filing-monthly-reports>.

(Approved by the Office of Management and Budget under OMB Control No. 1901-0294)

M. All monthly report filings on Form FE-746R shall be made to the Office of Regulation, Analysis, and Engagement according to the methods of submission listed on the Form FE-746R reporting instructions available at <https://www.energy.gov/fecm/regulation>.

N. Sierra Club's Motion to Intervene and Protest Out of Time is denied.³⁵¹

Issued in Berkeley, California, on May 29, 2025.



Chris Wright
U.S. Secretary of Energy

³⁵⁰ See 79 Fed. Reg. at 65,541-42.

³⁵¹ 10 C.F.R. § 590.303(d).

**APPENDIX: LONG-TERM AUTHORIZATIONS ISSUED FOR
EXPORTS FROM THE PORT ARTHUR LNG TERMINAL**

Table 1: Authorizations to FTA Countries

Docket Nos.	Authorization Holder	Terminal Facilities	Order No. (with most recent amendment)	Date Issued	Volume (Bcf/yr)
15-53-LNG; 18-162-LNG ³⁵²	Port Arthur LNG, LLC	Base Project (Trains 1-2)	3698-C	Aug. 20, 2015, as amended	698
20-23-LNG	Port Arthur LNG Phase II, LLC	Expansion Project (Trains 3-4)	4562	July 14, 2020	698
Total FTA Volume					1,396

Table 2: Authorizations to Non-FTA Countries

Docket No.	Authorization Holder	Terminal Facilities	Order No. (with most recent amendment)	Date Issued	Volume (Bcf/yr)
15-53-LNG	Port Arthur LNG, LLC	Base Project (Trains 1-2)	4372-B	May 2, 2019, as amended	698
20-23-LNG	Port Arthur LNG Phase II, LLC	Expansion Project (Trains 3-4)	5292	May 28, 2025	698
Total Non-FTA Volume					1,396

*Note: The FTA and non-FTA volumes are not additive.

³⁵² Although Order No. 3698 was issued in Docket No. 15-53-LNG, the amendments to Order No. 3698 were docketed in both Docket Nos. 15-53-LNG and 18-162-LNG.