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UNITED STATES OF AMERICA **DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY**

In The Matter Of:		
)	
Freeport LNG Expansion, L.P.)	FE Docket No. 18- 26 - LNG
FLNG Liquefaction 4, LLC)	
)	

APPLICATION FOR LONG-TERM AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS TO NON-FREE TRADE AGREEMENT NATIONS

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Pursuant to Section 3 of the Natural Gas Act ("NGA")¹ and Part 590 of the Department of Energy's ("DOE") regulations,² Freeport LNG Expansion, L.P. ("Freeport Expansion"), and FLNG Liquefaction 4, LLC ("FLIQ4" and together with Freeport Expansion, "FLEX4") hereby request that DOE, Office of Fossil Energy ("DOE/FE") grant authorization to engage in long-term, multi-contract exports of domestically produced liquefied natural gas ("LNG") in an amount up to .72 billion cubic feet per day ("Bcf/d") from the proposed Train 4 Project (the "Train 4 Project" or "Project") at the Freeport LNG Terminal ("Terminal") on Quintana Island near Freeport, Texas.³ FLEX4 is seeking to export LNG to any nation that has, or in the future develops, the capacity to import LNG, with which the United States ("U.S.") does not have a free trade agreement ("FTA") requiring the national treatment for trade in natural gas and LNG, and with which trade is not prohibited by U.S. law or policy ("Non-FTA Nations").

¹ 15 U.S.C. § 717b (2012).

² 10 C.F.R. Part 590 (2017).

FLEX4's affiliates Freeport LNG Development, L.P. ("Freeport Development"), FLNG Liquefaction, LLC, FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC are currently constructing a liquefaction and export facility at the Terminal, a Pretreatment Facility and an associated feed gas pipeline (collectively, the "Liquefaction Project"). The Federal Energy Regulatory Commission ("Commission" or "FERC") authorized the siting, construction and operation of the Liquefaction Project in 2014. See Freeport LNG Development, L.P. et al., 148 FERC ¶ 61,076 (2014), reh'g denied, 149 FERC ¶ 61,119 (2014). The Train 4 Project will be constructed as an expansion of the Liquefaction Project.

FLEX4 requests such authorization to engage in exports, on its own behalf and as agent for other entities who themselves hold title to the LNG, for a 20-year term commencing on the earlier of the date of first commercial export from the Train 4 Project, or 7 years from the issuance of the authorization sought herein.

In support of the instant application ("Application"), FLEX4 provides as follows:

I. DESCRIPTION OF APPLICANTS

The exact legal name of Freeport Expansion is Freeport LNG Expansion, L.P. Freeport Expansion is a Delaware limited partnership and is wholly owned by FLEX Holdco, LLC, a Delaware limited liability company. FLEX Holdco, LLC is wholly owned by Freeport Development.

The exact legal name of FLIQ4 is FLNG Liquefaction 4, LLC. FLIQ4 is a Delaware limited liability company and wholly owned subsidiary of Freeport Expansion. FLIQ4 has been formed for the purposes of obtaining all necessary financing, constructing and owning the Train 4 Project. Both Freeport Expansion and FLIQ4 are authorized to do business in Texas and have a principal place of business at 333 Clay Street, Suite 5050, Houston, Texas 77022.

II. COMMUNICATIONS AND CORRESPONDENCE

All correspondence and communications concerning this Application, including all service of pleadings and notices, should be directed to the following persons:⁴

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III. BACKGROUND

On June 29, 2017, FLIQ4 and Freeport Development filed an application ("Train 4 FERC Application") with the Commission for authorization to site, construct, and operate the Train 4 Project, consisting of additional natural gas liquefaction facilities at the Terminal, as well as associated pretreatment and pipeline facilities.⁵ The Train 4 FERC Application is currently under Commission review in FERC Docket No. CP17-470-000.⁶ FERC Staff has indicated that it will prepare an Environmental Assessment for the Train 4 Project.⁷

FLEX4 requests waiver of Section 590.202(a) of DOE's regulations, to the extent necessary to include outside counsel on the official service list in this proceeding. 10 C.F.R. § 590.202(a).

⁵ Freeport LNG Development, L.P. & FLNG Liquefaction 4, LLC, Application for Authorization Under Section 3 of the Natural Gas Act, Docket No. CP17-470-000 (June 29, 2017).

Freeport LNG Development, L.P. & FLNG Liquefaction 4, LLC, Notice of Applications, Docket Nos. CP17-470-000 & PF15-25-000 (July 14, 2017).

Id.; Freeport LNG Development, L.P., Supplemental Notice of Intent to Prepare an Environmental Assessment for the Planned Freeport LNG Train 4 Project and Request for Comments on Environmental Issues, Docket No. PF15-25-000 (August 31, 2016); Freeport LNG Development, L.P., Notice of Intent to Prepare an Environmental Assessment for the Planned Freeport LNG Train 4 Project and Request for Comments on Environmental Issues, Docket No. PF15-25-000 (August 19, 2015).

Additionally, in FE Docket Nos. 10-160-LNG⁸ and 12-06-LNG, FLIQ4 affiliates FLNG Liquefaction, LLC, FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC, together with Freeport Expansion (collectively, "FLEX"), are authorized by DOE/FE to export LNG from the Terminal to FTA nations in an amount up to 2.8 Bcf/d of natural gas. In FE Docket Nos. 10-161-LNG, 11-161-LNG, 11 and 16-108-LNG, 12 FLEX is authorized by DOE/FE to export LNG from the Terminal to Non-FTA Nations in an amount up to 2.14 Bcf/d of natural gas. Collectively, FE

Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, Order Granting Long-Term Authorization to Export Liquefied Natural Gas from Freeport LNG Terminal to Free Trade Nations, DOE/FE Order No. 2913, FE Docket No. 10-160-LNG (Feb. 10, 2011); Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, Errata Notice, DOE/FE Order No. 2913, FE Docket No. 10-160-LNG (Feb. 17, 2011); Freeport LNG Expansion, L.P. et al., Order Amending Applications in Docket Nos. 10-160-LNG, 10-161-LNG, and 12-06-LNG and Granting Request in Docket No. 11-161-LNG to add FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC as Applicants and Authorization Holders, DOE/FE Order Nos. 2913-A, 3066-A, 3282-A (Feb. 7, 2014) (hereinafter Amendment Order); Freeport LNG Expansion, L.P. et al., Order Granting Request to Extend Commencement Date of Export Authorization, DOE/FE Order No. 2913-B, FE Docket No. 10-160-LNG (June 7, 2017).

Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal to Free Trade Agreement Nations, DOE/FE Order No. 3066, FE Docket No. 12-06-LNG (Feb. 10, 2012); Amendment Order.

Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, Order Conditionally 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, DOE/FE Order No. 3282, FE Docket No. 10-161-LNG (May 17, 2013); Amendment Order; Freeport LNG Expansion, L.P. et al., Order Amending DOE/FE Order Nos. 3282 and 3357, DOE/FE Order Nos. 3282-B & 3357-A, FE Docket Nos. 10-161-LNG & 11-161-LNG (June 6, 2014); Freeport LNG Expansion, L.P. et al., 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, DOE/FE Order No. 3282-C, FE Docket No. 10-161-LNG (Nov. 14, 2014) [hereinafter DOE/FE Order No. 3282-C].

Freeport LNG Expansion, L.P. et al., Order Conditionally 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, DOE/FE Order No. 3357, FE Docket No. 11-161-LNG (Nov. 15, 2013); Freeport LNG Expansion, L.P. et al., Errata, DOE/FE Order No. 3357, FE Docket No. 11-161-LNG (Dec. 13, 2013); Amendment Order; Freeport LNG Expansion, L.P. et al., Order Amending DOE/FE Order Nos. 3282 and 3357, DOE/FE Order Nos. 3282-B & 3357-A, FE Docket Nos. 10-161-LNG & 11-161-LNG (June 6, 2014); Freeport LNG Expansion, L.P. et al., 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, DOE/FE Order No. 3357-B, FE Docket No. 11-161-LNG (Nov. 14, 2014); Freeport LNG Expansion, L.P. et al., Opinion and Order Denying Request for Rehearing of Orders 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, DOE/FE Order No. 3357-C, FE Docket No. 11-161-LNG (Dec. 4, 2015) [collectively, hereinafter DOE/FE Order No. 3357-B].

Freeport LNG Expansion, L.P. et al., 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, DOE/FE Order No. 3957, FE Docket No. 16-108-LNG (Dec. 19, 2016).

Docket Nos. 10-160-LNG, 10-161-LNG, 11-161-LNG, 12-06-LNG, and 16-108-LNG are referred to herein as the "FLEX Proceedings."

IV. TRAIN 4 PROJECT DESCRIPTION

Overview

The Train 4 Project will add Train 4, a fourth liquefaction unit at the Terminal; Unit 4, a fourth pretreatment unit at the Pretreatment Facility; and the Pipeline, a 10.6-mile-long, 42-inch diameter pipeline between the existing Stratton Ridge Meter Station, the Pretreatment Facility, and the Terminal. The Project also will include construction of all required utility, auxiliary, and control systems, including common utilities, spill containment systems, fire and safety systems, two electric substations, security systems, and plant roads.

Quintana Island Terminal

The major Project component to be constructed at the Terminal is one propane pre-cooled mixed refrigerant train (Train 4), which will be identical to the Liquefaction Project's three previously authorized liquefaction trains, along with ancillary support facilities and infrastructure. The proposed liquefaction facilities associated with the Train 4 Project will be located entirely within the footprint of the previously authorized Terminal. Proposed facilities at the Terminal include:

- propane pre-cooled mixed refrigerant LNG train (Train 4)
- spill containment systems
- firewater system
- utility and auxiliary area (potable and service water, plant and instrument air)
- pipe racks and plant piping
- electrical high-voltage substation
- plant roads

Pretreatment Facility

The major Project component to be constructed at the Pretreatment Facility is Unit 4, which will be identical to the Liquefaction Project's three authorized pretreatment units, along with ancillary support facilities and infrastructure. The proposed facilities will be located entirely within the footprint of the Pretreatment Facility, which is currently under construction. Proposed facilities at the Pretreatment Facility include:

- natural gas pretreatment unit (Unit 4)
- tank storage area
- inlet and outlet compression
- emergency electric generator
- utility area (instrument and plant air, hot oil heaters, nitrogen and fuel gas systems)
- pipeline metering facilities
- pipe racks and plant piping
- electric substation
- plant roads

Pipeline

The Train 4 Project includes a new, approximately 10.6-mile-long, 42-inch-diameter, NGA Section 3 natural gas pipeline (with a maximum allowable operating pressure of 1,440 pounds per square inch gauge) to be constructed between the Terminal, Pretreatment Facility, and Stratton Ridge Meter Station, as well as fiber optic bundles within the Pipeline trench. In addition to providing natural gas deliveries to the Train 4 Project, the Pipeline also will provide redundancy and minimize the potential for interruptions in natural gas deliveries to the Terminal. Approximately 87 percent of the proposed route is within existing aboveground facility sites or collocated with the existing pipeline/utility corridor.

Project facilities within the Pipeline corridor also will include minor modifications at three existing or authorized aboveground facility locations along the Pipeline route (Terminal, Pretreatment Facility, and Stratton Ridge Meter Station). Additionally, certain existing/authorized facilities at the Terminal, Pretreatment Facility, and along the Pipeline corridor, will be utilized without modification, tied into and/or expanded for the Train 4 Project.

V. AUTHORIZATION REQUESTED

FLEX4 hereby respectfully requests that DOE/FE grant authorization to engage in long-term, multi-contract exports of .72 Bcf/d of natural gas in the form of LNG from the Terminal to Non-FTA Nations, on its own behalf and as agent for other entities who themselves hold title to the LNG. FLEX4 requests that DOE/FE issue such authorization for a 20-year term commencing on the earlier of the date of first commercial export from the Train 4 Project, or 7 years from the issuance of the authorization sought herein. FLEX4 also requests that it be permitted to continue exporting for a total of three years following the end of the 20-year export term requested herein, solely to export any Make-Up Volumes¹³ that it was unable to export during the original export period.

FLEX4 further requests authorization to apply for short-term export authorization to export Commissioning Volumes¹⁴ prior to the commencement of the first commercial exports of domestically sourced LNG from the Train 4 Project. FLEX4 requests that Commissioning Volumes not be counted against the maximum level of volumes requested for export herein.

[&]quot;Make-Up Volumes" are defined as the difference between the authorized LNG export volume and the actual LNG export volume during the export term authorized by DOE/FE.

[&]quot;Commissioning Volumes" are defined as the volume of LNG produced and exported under a short-term authorization during the initial start-up of a LNG train, before the LNG train has reached its full steady-state capacity and begun its commercial exports pursuant to FLEX4's long-term contracts.

FLEX4 respectfully submits that the Environmental Assessment being developed by the Commission and the information provided herein, and in the Train 4 FERC Application, will demonstrate that the authorization requested herein will not constitute a major federal action significantly affecting the quality of the human environment. FLEX4 believes that as a cooperating agency in the FERC proceeding, this will be sufficient to comply with the National Environmental Policy Act ("NEPA").¹⁵

Finally, FLEX4 respectfully requests that DOE/FE issue the authorization as requested herein no later than November 2018.

VI. COMMERCIAL TERMS AND EXPORT SOURCES

Because of the interconnectivity of the U.S. natural gas pipeline system, FLEX4 and the Train 4 Project's customers will have access to almost any point on the grid through direct delivery or by displacement. As of this filing, FLEX4 has not yet entered into any long-term LNG export contracts in conjunction with the authorization requested herein. Accordingly, FLEX4 is not submitting transaction-specific information (e.g., long-term supply agreements and long-term export agreements) at this time.¹⁶

Consistent with prior authorizations granted by DOE/FE, FLEX4 will file (or will ensure that its customers file) with DOE/FE, any long term contracts (either as unredacted copies, or under seal, with either: (i) a copy of each long-term contract with commercially sensitive information redacted, or (ii) a summary of all major provisions of the contracts including, but not limited to, the parties to each contract, contract term, quantity, any take-or-pay or equivalent provisions/conditions, destinations, re-sale provisions, and other relevant provisions).

¹⁵ 42 U.S.C. §§ 4321 et seq. (2012).

^{42 0.5.}C. §§ 4321 et seq. (2012).

¹⁶ See, e.g., DOE/FE Order Nos. 3282-C, supra note 10; DOE/FE Order No. 3357-B, supra note 11.

VII. APPLICABLE LEGAL STANDARD

FLEX4's Application must be reviewed under Section 3(a) of the NGA, which provides that, unless there is a finding that proposed exports "will not be consistent with the public interest," DOE/FE must authorize such exports. Specifically, Section 3(a) of the NGA reads in relevant part:

...no 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 Commission authorizing it to do so. The Commission *shall issue* such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest.¹⁸

A presumption in favor of approval of an application for non-FTA authorization, which opponents bear the burden of overcoming, is created by Section 3(a) of the NGA. However, it is clear from the abundance of evidence in the public record that exports of LNG from the U.S. are in the public interest. In granting FLEX's applications for export authorization from the Terminal to Non-FTA Nations, ¹⁹ DOE/FE pointed to market studies and other supporting evidence submitted in the FLEX Proceedings which demonstrated the substantial economic and public benefits that are likely to follow from U.S. exports of natural gas as LNG. That same rationale is equally applicable here, and FLEX4 herein incorporates by reference the record developed in the FLEX Proceedings, which clearly demonstrated the public interest benefits of exports from the

¹⁷ 15 U.S.C. § 717b(a).

¹⁸ *Id.* (emphasis added).

¹⁹ See DOE/FE Order Nos. 3282-C, supra note 10; DOE/FE Order No. 3357-B, supra note 11.

Terminal.²⁰ Additionally, FLEX4 hereby incorporates the DOE-commissioned studies on LNG exports.²¹

VIII. PUBLIC INTEREST

DOE/FE has previously concluded that exports from the Terminal are not inconsistent with the public interest.²² In Order Nos. 3282-C and 3357-B, DOE/FE found that LNG exports from the Terminal will result in many local and national economic and public benefits.²³ Consistent with this prior finding, the benefits of the Train 4 Project, and the improved outlook for domestic natural gas production, FLEX4 submits that the exports proposed from the Train 4 Project are consistent with the public interest.

While there is no explicit criteria for the public interest analysis laid out in the regulations, the 1984 DOE *Policy Guidelines* state that "[t]he market, not government, should determine the price and other contract terms of imported [and exported] gas," and that "the federal government's primary responsibility ... should be to evaluate the need for the gas"²⁴ To this end, DOE/FE

Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, Application for Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries, FE Docket No. 10-161-LNG (Dec. 17, 2010); Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, Application for Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries, FE Docket No. 11-161-LNG (Dec. 19, 2011).

U.S. Energy Information Administration ("EIA"), Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets (Oct. 29, 2014), available at http://www.eia.gov/analysis/requests/fe/; NERA Economic Consulting, Macroeconomic Impacts of LNG Exports from the United States (Dec. 3, 2012), available at http://energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf ("NERA Report"); EIA, Effect of Increased Natural Gas Exports on Domestic Energy Markets, as Requested by the Office of Fossil Energy (Jan. 2012), available at http://energy.gov/sites/prod/files/2013/04/f0/fe_eia_lng.pdf (together with the NERA Report, "2012 LNG Export Study").

²² See DOE/FE Order Nos. 3282-C, supra note 10; DOE/FE Order No. 3357-B, supra note 11.

²³ *Id*.

DOE, New Policy Guidelines and Delegation Orders from Secretary of Energy to Economic Regulatory Administration and Federal Energy Regulatory Commission Relating to the Regulation of Imported Natural Gas, 49 Fed. Reg. 6684, 6685 (Feb. 22, 1984). While the Policy Guidelines addressed natural gas imports, DOE/FE has recognized that their "principles are applicable to exports as well." Phillips Alaska Nat. Gas Corp. &

has stated in previous export authorizations that domestic need for the natural gas proposed to be exported is "the only explicit criterion that must be considered in determining the public interest."²⁵

Current Projections of Supply and Demand

Current projections indicate that supply available to domestic consumers will far exceed market demand for the foreseeable future. Governmental sources, such as those produced by the EIA, make clear that domestic natural gas resources are abundantly available to meet projected future domestic needs, including the volumes this Application proposes to export.

The EIA's December 2017 Short-Term Energy Outlook forecasts that "natural gas production in 2018 will be 6.1 Bcf/d higher than the 2017 level." The EIA has further stated that "rising natural gas production [is keeping] pace with increasing consumption and demand for exports—particularly for [LNG]...."

Long-term projections confirm that such a trend will continue into the foreseeable future. Domestic natural gas production is projected to increase 42% between 2016 and 2040.²⁸ The EIA's 2018 Annual Energy Outlook ("AEO") projects that natural gas production will account for

Marathon Oil Co., Order Extending Authorization to Export Liquefied Natural Gas from Alaska, DOE/FE Opinion and Order No. 1473, at 14, FE Docket No. 96-99-LNG (Apr. 2, 1999) [hereinafter *Phillips Alaska*].

Phillips Alaska at 14. "In prior decisions, however, DOE/FE has identified a range of factors that it evaluates when reviewing an application for export authorization. These factors include economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others." DOE/FE Order No. 3282-C, supra note 10, at 9.

²⁶ EIA, *December* 2017 *Short-Term Energy Outlook* (December 12, 2017), *available at* https://www.eia.gov/outlooks/steo/.

²⁷ EIA, October 2017 Short-Term Energy Outlook (October 10, 2017), available at https://www.eia.gov/outlooks/steo/archives/oct17.pdf.

Letter from Jack N. Gerard, Pres. and Chief Exec. Officer, API, to Rick Perry, Sec. of Energy, (Mar. 14, 2017), available at http://www.api.org/~/media/Files/News/Letters-Comments/2017/3-14-17-Ltr-to-DOE-Secretary-Perry-LNG-Exports-Authorization.pdf.

nearly 39% of U.S. energy production by 2050 (in the reference case).²⁹ Additionally, the 2018 AEO confirms that "[n]atural gas production increases in every case, supporting higher levels of domestic consumption and natural gas exports."³⁰ The EIA has further concluded that "[i]ncreasing LNG exports leads to higher economic output, as measured by real gross domestic product (GDP), as increased energy production spurs investment."³¹

Economic Benefits of LNG Exports

Analyses performed and commissioned by DOE show that LNG exports from the U.S. benefit the U.S. economy as a whole and would not result in any significant adverse price impacts to U.S. consumers.³² As DOE/FE noted, "[t]he 2012 LNG Export Study concluded that LNG exports at...6 Bcf/d of natural gas and higher...would result in higher U.S. natural gas prices, but that these price changes would remain in a relatively narrow range across the scenarios studied."³³

Furthermore, a subsequent 2014 NERA Report confirmed prior findings. The 2014 NERA Report held that across all studied scenarios "U.S. economic welfare consistently increases as the volume of natural gas exports increases. This includes scenarios in which there are unlimited

²⁹ EIA, Annual Energy Outlook 2018 With Projections to 2050 at 20 (Feb. 6, 2018), available at https://www.eia.gov/outlooks/aeo/pdf/AEO2018_FINAL_PDF.pdf.

³⁰ *Id* at 59.

EIA, Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets, at 24 (October 2014), available at https://www.eia.gov/analysis/requests/fe/pdf/lng.pdf.

³² See DOE/FE Order Nos. 3282-C, supra note 10; DOE/FE Order No. 3357-B, supra note 11.

Flint Hills Resources, LP, Opinion and Order Granting Long-Term, Multi Contract Authorization to Export Liquefied Natural Gas In ISO Containers and In Bulk Loaded at the Stabilis LNG Eagle Ford Facility in George West, Texas, and Exported by Vessel to Non-Free Trade Agreement Nations, DOE/FE Order No. 3829, FE Docket No. 15-168-LNG (May 20, 2016).

exports. Unlimited exports always create greater benefits than limited exports in comparable scenarios."³⁴

Finally, the third DOE commissioned study, performed jointly by the Center for Energy Studies at Rice University's Baker Institute and Oxford Economics (the "2015 Rice-Oxford Study"), reviewed the macroeconomic impact of levels of U.S. LNG exports, sourced from the lower-48 states in volumes ranging from 12 to 20 Bcf/d of natural gas.³⁵ As previously highlighted by DOE/FE, both the 2015 Rice-Oxford Study and the 2014 NERA Report concluded that greater LNG exports would result in an increase in GDP and both "[s]tudies project higher levels of employment with increased LNG exports."³⁶

Project Specific Economic Benefits

The Train 4 Project will result in significant job creation. Over the Project's 42-month construction period, approximately 3,000 on-site engineering and construction jobs will be created or extended in duration. Hundreds of off-site jobs will be created to support design, fabrication, and construction of the Train 4 Project. With regard to operational jobs, on-going management, operation, and maintenance of the proposed Project facilities will create approximately 106 new full-time positions.

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Robert Baron, et al., *Updated Macroeconomic Impacts of LNG Exports from the United States*, NERA ECONOMIC CONSULTING, at 7 (March 24, 2014), *available at* http://www.nera.com/content/dam/nera/publications/archive2/PUB_LNG_Update_0214_FINAL.pdf.

Adrian Cooper et al., *The Macro Economic Impacts of Increasing U.S. LNG Exports*, Center for Energy Studies, Baker Institute, Rice University & Oxford Economics (Oct. 29, 2015), *available at* https://energy.gov/sites/prod/files/2015/12/f27/20151113 macro impact of lng exports 0.pdf.

Golden Pass Products LLC, 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, DOE/FE Order No. 3978, at 76-77, FE Docket No. 12-156-LNG (Apr. 25, 2017) [hereinafter 2017 Golden Pass Order] (summarizing the conclusions of the 2015 Rice-Oxford Study and 2014 NERA Report).

Additionally, the Train 4 Project will result in significant economic stimulus. The benefits of the Train 4 Project to the American economy are estimated to be \$2.7- to \$3.8-billion annually or \$54-to \$76-billion over a 20-year period. Assuming an average LNG value of \$7 per million British thermal units, Train 4 exports will improve U.S. balance of trade by approximately \$1.7 billion per year.

U.S. and Global Energy Policy

Natural gas exports also are consistent with U.S. policy initiatives and global energy priorities. The current administration's policy goals with regard to infrastructure development support approval of the Application. In one of his first executive orders, the President stated "it is the policy of the executive branch to streamline and expedite, in a manner consistent with law…approvals for all infrastructure projects."³⁷

The Application is also consistent with Energy Secretary Rick Perry's recent statements that the new Administration wants "America to achieve energy dominance by utilizing our abundant resources for good, both here and abroad...An energy-dominant America will export to markets around the world, increasing our global leadership and our influence." With regard to global energy priorities, as DOE/FE recently remarked, "[a]n efficient, transparent international market for natural gas with diverse sources of supply provides both economic and strategic benefits to the United States and our allies." 39

Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects, Exec. Order No. 13,766, 82 Fed. Reg. 8657 (Jan 24, 2017).

White House, Office of the Press Secretary, Press Briefing by Secretary of Energy Rick Perry and Principal Deputy Press Secretary Sarah Sanders (June 27, 2017) *available at* https://www.whitehouse.gov/briefings-statements/press-briefing-secretary-energy-rick-perry-principal-deputy-press-secretary-sarah-sanders-062717/.

³⁹ 2017 Golden Pass Order, at 145.

IX. ENVIRONMENTAL CONSIDERATIONS

As the lead agency under NEPA, FERC will review any potential environmental impacts of the Train 4 Project in its EA, in accordance with the Energy Policy Act of 2005 and the NGA. 40 In this regard, DOE/FE is anticipated to participate as a cooperating agency in FERC's environmental review process for the Train 4 Project. Under DOE/FE regulations adopted from the Council on Environmental Quality that govern its role as a cooperating agency in the NEPA process, 41 "...DOE shall cooperate with the other agencies in developing environmental information..." and adopt the findings of FERC's environmental review to the extent that the Commission satisfactorily addresses comments and suggestions raised by DOE/FE during the process. 43

Impacts

Utilizing previously authorized workspaces and facilities associated with the Quintana Island Terminal, Pretreatment Facility, and Stratton Ridge Meter Station, as well as the existing pipeline/utility corridor will result in far fewer environmental impacts than if the Train 4 Project were developed at a greenfield site. Specifically, the vast majority (95 percent) of the permanent Train 4 Project footprint will be located within areas previously disturbed by the Phase I, Phase II Modification, and/or Liquefaction Projects. The Train 4 Project will result in an additional 75 ship visits per year above the current level expected for the Liquefaction Project, however, the

⁴⁰ 15 U.S.C. § 717b(e); *id*. § 717n(b)(1).

⁴¹ 10 C.F.R. § 1021.103 (2017).

See id. § 1021.342; see also 40 C.F.R. §§ 1501.6, 1508.5 (requiring that Federal agencies responsible for preparing NEPA analyses and documentation do so in cooperation with State and local governments and other agencies with jurisdiction by law or special, and providing that—upon request of the lead agency—any other Federal agency which has jurisdiction by law shall be a cooperating agency).

⁴³ See 40 C.F.R. § 1506.3 (2017).

frequency and size of LNG carriers calling on the Terminal will not increase beyond the maximum number of ship visits reviewed and authorized by the Commission (400 ships per year) for the Phase II Project.

Therefore, only minor impacts are anticipated from the Train 4 Project as a whole, beyond what was previously evaluated and approved by the Commission. Furthermore, FLEX4 believes that all potentially adverse environmental impacts will be avoided or appropriately mitigated by the proposed Project.

Benefits

Furthermore, as the purpose of the Project is to facilitate exports of LNG to foreign markets, it will not displace alternative energy sources from being utilized in the United States. LNG exported to foreign markets can serve as a complement to intermittent renewable energy sources, and provide consuming nations with an alternative to fossil fuels that emit higher levels of carbon dioxide ("CO2"), such as coal.⁴⁴ Similarly, any gas deliveries within the United States could displace consumption of higher emitting fossil fuels and complement any local use of renewables. The environmental benefits of natural gas stem largely from its distinct advantages as an energy source alternative, compared with other fossil fuels.

Assuming LNG exported from the Train 4 Project is used in place of other fossil fuels in recipient countries, a number of advantages can be realized. Because it is the cleanest burning fossil fuel, natural gas offers a number of environmental benefits when used as a substitute for oil and coal, and its abundance creates opportunities for new, more efficient technologies. The combustion of natural gas results in less pollution than the combustion of other fossil fuels.

DOE, Nat'l Energy Tech. Lab, *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States* (Document No. DOE/NTL-2014/1649). (May 29, 2014), *available at* http://energy.gov/fe/downloads/life-cycle-greenhouse-gas-perspective-exporting-liquefied-natural-gas-united-states.

Compared to the average air emissions from coal-fired generation, power plants that burn natural

gas produce half as much CO2, less than a third of the nitrogen oxides, and 1 percent of the sulfur

oxides. 45 Combustion of natural gas produces about 25 percent less CO2 than combustion of

gasoline or diesel.⁴⁶ Accordingly, natural gas is not as significant a contributor to acid rain or

smog formation, when compared to other petroleum products and coal. It is estimated that using

natural gas to fuel 50 percent of the world's vehicles would reduce annual global CO2 emissions

by about 2.0 billion metric tonnes, decreasing global CO2 emissions by approximately 6 percent.⁴⁷

For the foregoing reasons, FLEX4 respectfully submits that the Train 4 Project is not

inconsistent with, and clearly serves, the public interest.

X. **APPENDICES**

Appendix A: Verification

Appendix B: Opinion of Counsel

U.S. Environmental Protection Agency, 2013.

EIA, FAQ - How much carbon dioxide is produced when different fuels are burned? (last updated June 14, 2016),

https://www.eia.gov/tools/faqs/faq.php?id=73&t=11.

Robert A. Hefner III, THE GRAND ENERGY TRANSITION: THE RISE OF ENERGY GASES, SUSTAINABLE LIFE AND GROWTH, AND THE NEXT GREAT ECONOMIC EXPANSION (John Wiley & Sons Publishers 2009).

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XI. CONCLUSION

WHEREFORE, FLEX4 respectfully requests that DOE/FE grant its request to engage in

long-term, multi-contract exports of .72 Bcf/d of domestically produced LNG from the Train 4

Project to Non-FTA Nations for a 20-year period commencing on the earlier of the date of first

commercial export from the Train 4 Project, or 7 years from the issuance of the authorization

sought herein. FLEX4 respectfully requests that the DOE/FE issue the authorization as requested

herein by November 2018.

Respectfully submitted,

/s/Lisa M. Tonery

Lisa M. Tonery

Mariah T. Johnston

Attorneys for

Freeport LNG Expansion, L.P. &

FLNG Liquefaction 4, LLC

Dated: March 6, 2018

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APPENDIX A

VERIFICATION

VER	IFIC	ATI	ON
A TOTAL			OIL

State of)
County of)

BEFORE ME, the undersigned authority on this day personally appeared John Tobola, who, having first by me been duly sworn, says he is the Senior Vice President and General Counsel for Freeport LNG Expansion, L.P. and is duly authorized to make this Verification; that he has read the forgoing instrument and that the facts therein stated are true and correct to the best of his knowledge, information, and belief.

John Tobola

Senior Vice President and General Counsel Freeport LNG Expansion, L.P.

SWORN TO and SUBSCRIBED on this 5 day of March 2018.

NAME: CAMOL BROOKS

TITLE: Notary Pubic

Commission Expires:

11-17-2020



APPENDIX B

OPINION OF COUNSEL



March 5, 2018

Ms. Amy Sweeney
Office of Fossil Energy
U.S. Department of Energy
FE-34
Forrestal Building
1000 Independence Avenue, S.W.
Washington, DC 20585

RE: Freeport LNG Expansion, L.P., & FLNG Liquefaction 4, LLC

DOE/FE Docket No. 18-26-LNG

Application for Long-Term Authorization to Export LNG

Dear Ms. Sweeney:

This opinion of counsel is submitted pursuant to Section 590.202(c) of the regulations of the U.S. Department of Energy, 10 C.F.R. § 590.202(c) (2017). I am the duly authorized representative for Freeport LNG Expansion, L.P. and FLNG Liquefaction 4, LLC. I have reviewed the organizational and internal governance documents of Freeport LNG Expansion, L.P., and FLNG Liquefaction 4, LLC and other documents and authorities as necessary for purposes of this opinion. On the basis of the foregoing, it is my opinion that the proposed long-term, multi-contract exports of liquefied natural gas by Freeport LNG Expansion, L.P., and FLNG Liquefaction 4, LLC, as described in the above-referenced application, are within the limited partnership and company powers of Freeport LNG Expansion, L.P., and FLNG Liquefaction 4, LLC.

Respectfully submitted,

John Tobola

Senior Vice President & General Counsel

Freeport LNG Expansion, L.P.