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

In the Matter of:

NFE Altamira FLNG, S. de R.L. de C.V.	)	**FE Docket No. 22-110-LNG**

APPLICATION FOR LONG-TERM, MULTI-CONTRACT AUTHORIZATIONS TO EXPORT NATURAL GAS TO MEXICO AND TO RE-EXPORT LIQUEFIED NATURAL GAS FROM MEXICO TO FREE TRADE AGREEMENT AND 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 regulations of the United States Department of Energy ("DOE"),[2] NFE Altamira FLNG, S. de R.L. de C.V. ("Applicant") hereby submits the instant application ("Application")[3] to DOE's Office of Fossil Energy and Carbon Management ("DOE/FECM"), [4] requesting long-term, multi-contract authorization to export an amount of up to approximately 158 billion standard cubic feet ("Bcf") per year ("Bcf/y") of natural gas by pipeline to Mexico, via the border-crossing facilities of Valley Crossing Pipeline, LLC ("Valley Crossing Pipeline" or "Valley Crossing").[5]

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1 15 U.S.C. § 717b (2018).

2 10 C.F.R. Part 590 (2021).

3 Pursuant to 10 C.F.R. § 590.207, a non-refundable filing fee of fifty dollars ($50) has been remitted via Pay.gov. Confirmation of payment is provided herewith.

4 DOE/FECM was previously named the Office of Fossil Energy ("DOE/FE"), and in this regard, the prior acronym "DOE/FE" is used herein when referencing historical documents.

5 As discussed herein, Applicant also seeks authorization to export via any future cross-border pipelines that may be constructed, independent of the Project, which interconnect with Sur de Texas Tuxpan (as defined below).

Applicant further requests long-term, multi-contract authorization to re-export[6] from Mexico via ocean-going vessel up to approximately 145 Bcf/y (equivalent to approximately 2.8 million tonnes per annum ("MTPA")) of U.S.-sourced natural gas as liquefied natural gas ("LNG") from a floating liquefaction and export terminal project, known as New Fortress Energy's Altamira FLNG Project (or "Project"), proposed by an affiliate of the Applicant, Mexico FLNG S. de R.L. de C.V. (also an indirect wholly-owned subsidiary of NFE (as defined below)), which will be located off the coast of Mexico. Applicant requests such authorization, on a non-additive basis, to export such LNG from Mexico to (i) all countries with which the United States has, or in the future enters into, a free trade agreement ("FTA") requiring national treatment for trade in natural gas ("FTA Nations"), and (ii) any country that lacks an FTA with the United States requiring national treatment for trade in natural gas, and with which trade is not prohibited by U.S. law or policy and that has, or in the future develops, the capacity to import LNG ("Non-FTA Nations"). Applicant seeks such authorization in order to re-export from Mexico U.S.-sourced natural gas for which it has acquired title in the United States, as well as U.S.-sourced volumes for which it acquires title in Mexico.

Applicant seeks to export (or re-export, as applicable) the requested volumes on its own behalf and as agent for other entities that hold title to the natural gas at the time it is exported to Mexico and/or to the U.S.-sourced natural gas at the time it is re-exported as LNG from Mexico, as applicable. Consistent with the DOE's Term Extension Policy Statement,[7] Applicant requests

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[6] As defined in DOE/FE Order No. 4318-B, "re-export" means to ship or transmit U.S.-sourced natural gas in its various forms (gas, compressed, or liquefied) subject to DOE/FECM's jurisdiction under the NGA, 15 U.S.C. § 717b, from one foreign country (i.e., a country other than the United States) to another foreign country. *Energía Costa Azul, S. de R.L. de C.V.,* Order Amending Long-Term Authorization to Export Natural Gas to Mexico and to Other Free Trade Agreement Nations (ECA Large-Scale Project), DOE/FE Order No. 4318-B, FE Docket No. 18-145-LNG (Jun. 11, 2021) (*hereinafter* "DOE/FE Order No. 4318-B").

[7] Extending Natural Gas Export Authorizations to Non-Free Trade Agreement Countries Through the Year 2050, 85 Fed. Reg. 52,237 (Aug. 25, 2020) (*hereinafter* "Term Extension Policy Statement").

such authorizations for a term extending through December 31, 2050. Furthermore, Applicant requests that DOE/FECM grant the requested authorization by February 2023 so that it may commence exports immediately following completion of construction and in-service of the Project, which is anticipated to occur in the first quarter of 2023.

In support of this Application, Applicant respectfully submits the following:

I.
DESCRIPTION OF APPLICANT

The exact legal name of Applicant is NFE Altamira FLNG, S. de R.L. de C.V., a Mexican trading company with its principal place of business located at Edificio Corporativo Parque Reforma, Campos Eliseos # 400 Piso 16 – 1602, Lomas de Chapultepec, Alcaldía Miguel Hidalgo, Ciudad de México, Mexico 11000. The Applicant is an indirect wholly-owned subsidiary of New Fortress Energy Inc. ("NFE"), which is publicly traded on the NASDAQ: NFE, and has a principal place of business located at 111 West 19th Street, 8th Floor, New York, New York 10011.[8]

NFE finances, builds, and operates global gas-to-power energy infrastructure assets utilizing LNG as a means to provide cleaner, more stable, and more cost-effective fuel for power generation. These assets consist of power plants and regasification terminals operating or under development in Puerto Rico, Jamaica, Mexico, Nicaragua, Brazil, Ireland, and elsewhere. Given the significant future demand for LNG within NFE's downstream portfolio, in addition to the ever-increasing worldwide demand for LNG, there is a clear need for NFE to develop its own natural gas liquefaction capacity.

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[8] An organizational chart which further details the upstream ownership of the Applicant is provided herewith as Appendix C. The organizational chart provided in Appendix C contains privileged and confidential commercial/financial information regarding the corporate structure of the Applicant, and Applicant requests confidential treatment in accordance with 10 C.F.R. §§ 501.7(a)(11)(i) and 501.7(b)(2).

To optimize NFE's LNG procurement strategy and to combat energy supply issues worldwide, NFE formed the Applicant for the purpose of sourcing natural gas from the United States for delivery to the Project for subsequent liquefaction and re-export.

II.
COMMUNICATIONS AND CORRESPONDENCE

All communications and correspondence concerning the instant Application, including all service of pleadings and notices, should be directed to the following persons:[9]

Cameron MacDougall
New Fortress Energy Inc.
111 West 19th Street, 8th Floor
New York, New York 10011
Telephone: (516) 400-7342
Email: cameron.macdougall@newfortressenergy.com

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Email: mjohnston@orrick.com
Email: jacob.cunningham@orrick.com

III.
PROJECT DESCRIPTION

The Project, which will be owned by another wholly-owned indirect subsidiary of NFE—Mexico FLNG S. de R.L. de C.V., will provide a safe and reliable source of much needed natural gas supply to global markets in the form of LNG, consistent with NFE and the Applicant's commitment to making clean, affordable energy available to markets around the world. The Project will initially involve the installation of two nominal 1.4 MTPA liquefaction systems[10]

[9] Applicant requests waiver of Section 590.202(a) of DOE's regulations, to the extent necessary to include each of the individuals listed here on the official service list in this proceeding. 10 C.F.R. § 590.202(a).

[10] Total nominal capacity of 2.8 MTPA.

("FLNG1" and "FLNG2", respectively, and collectively "FLNGs")[11] off the coast of Altamira Tamaulipas, Mexico, in the Gulf of Mexico.[12] Each system will contain three platforms consisting of natural gas processing, natural gas liquefaction, and utilities and accommodations. FLNG1 will incorporate self-elevating platforms, and FLNG2, which will be located adjacent to FLNG1, will utilize fixed platform structures. Both FLNG1 and FLNG2 will transfer the LNG produced onto an LNG Carrier that will act as a Floating LNG Storage Unit ("FSU"). The FLNGs will be connected to the FSU via a flexible, partially submerged, 220-meter cryogenic hose transfer system, positioned approximately 107 meters (350 feet) from the FLNGs. LNG will be loaded from the FSU to ocean going vessels for delivery to export destinations.

The Project is designed using a modular approach to create liquefaction capacity more quickly, in order to rapidly address the global shortage in available LNG. Each FLNG is expected to receive approximately 79 Bcf/y of natural gas, of which approximately 6.5 Bcf/y will be consumed as (a) fuel in the liquefaction process and (b) process gas loss during the pretreatment process,[13] for a total productive capacity of approximately 2.1 MTPA of LNG per FLNG, which is equivalent to approximately 72.5 Bcf of natural gas (all figures are calculated on a higher heating value basis and assumes a 100 percent capacity factor).

To make deliveries of natural gas to the Project, Applicant plans to source natural gas from multiple supply hubs throughout the U.S. natural gas pipeline grid, and to transport such natural gas via pipeline from the United States to Mexico. The Applicant may also purchase U.S.-sourced

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[11] It is possible that Applicant's affiliate may seek authorization from the Mexican government for the addition of a third liquefaction system after permitting of the first two FLNGs is complete. If a third liquefaction system is added, Applicant will file with DOE/FECM to seek commensurate additional export authorization.

[12] A map of the proposed location is included herewith as Appendix D.

[13] Natural gas that is consumed in Mexico as fuel or process gas loss should be considered as exported to Mexico, an FTA country.

natural gas in Mexico from third-parties who have exported such gas from the United States, either pursuant to their own export authorizations or under the authorization requested herein, with Applicant acting as agent. The Applicant has identified Valley Crossing Pipeline[14] as the proposed export point from the United States. However, Applicant seeks to maintain optionality in its export authorization, should future cross-border pipelines be constructed, independent of the requested export authorization, which, similar to Valley Crossing Pipeline, interconnect with Sur de Texas - Tuxpan Pipeline offshore natural gas pipeline system ("Sur de Texas Tuxpan").

Valley Crossing Pipeline is a Texas intrastate pipeline, located in South Texas and designed to export natural gas to Mexico. It originates at the Nueces Header system near Agua Dulce with connectivity to a mix of approximately 10 intrastate and interstate pipelines.[15] The Valley Crossing pipeline system has the capacity to deliver up to 2.6 Bcf/d (well in excess of the export quantities proposed herein) from the Nueces Header to an offshore interconnect at the US/Mexico international border with the Sur de Texas Tuxpan pipeline system. The pipeline provides service to CFE International ("CFE"), a subsidiary of the Mexican Comisión Federal de Electricidad which serves approximately 37 million power customers in Mexico. CFE currently holds 100% of the firm capacity on Valley Crossing. The Applicant is presently in the process of entering into commercial agreements with CFE, for firm use of such capacity, as well as the capacity on Sur de Texas Tuxpan.

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[14] *See Valley Crossing Pipeline, LLC*, 161 FERC ¶ 61,084 (2017) (approving a border-crossing facility extending from a point in Texas state waters approximately 30 miles east of the City of Brownsville in Cameron County, Texas, to the international boundary with the State of Tamaulipas, Mexico in the Gulf of Mexico).

[15] Valley Crossing provides interconnectivity for a wide diversity of gas supplies that are transported from throughout the U.S. pipeline grid including on the systems of Tennessee Gas Pipeline, Transco, Kinder Morgan Tejas Pipeline, Pomelo Connector Pipeline, Houston Pipe Line Company, Natural Gas Pipeline Company of America, Enterprise Texas System, Lobo Pipeline Company, Eagle Ford Midstream, and Whistler Pipeline.

In Mexico, the feed gas supply will be transported to the Project site via the existing Sur de Texas Tuxpan offshore natural gas pipeline system, and one newly constructed pipeline lateral (also to be constructed as part of the Project by Mexico FLNG S. de R.L. de C.V., a wholly-owned indirect subsidiary of NFE), which will connect Sur de Texas Tuxpan to the Project. Sur de Texas Tuxpan is owned by a subsidiary of TC Energy and has the capacity to deliver up to 2.6 Bcf/d, which capacity is also held entirely by CFE. LNG carriers will call on the Project approximately 40 times per year. Other than temporary construction staging areas, there are no onshore facilities associated with the Project.

The construction and operation of the required pipeline lateral and floating liquefaction facilities will require permits and authorizations from various Mexican federal agencies, as described in detail below.

IV.
AUTHORIZATION REQUESTED

Applicant respectfully requests long-term, multi-contract authorization (1) to export up to 158 Bcf/y of natural gas to Mexico via pipeline, commencing on the date of first export and (2) to re-export up to 145 Bcf/y (equivalent to approximately 2.8 MTPA) of U.S. natural gas as LNG from Mexico to other FTA Nations and to Non-FTA Nations, via ocean going vessel, commencing on the date of first export following the commencement of commercial operation of the Project, which is currently projected to occur in the first quarter of 2023. Applicant seeks such authorization in order to re-export from Mexico U.S.-sourced natural gas for which it has acquired title in the United States, as well as U.S.-sourced volumes for which it acquires title in Mexico. Applicant requests that the term of the export authorizations extend up to and through December 31, 2050.

While Applicant anticipates that the volumes for which authorization is sought herein will be exported from the United States to Mexico via the Valley Crossing Pipeline, Applicant respectfully requests that DOE/FECM not limit its authorization in a manner that would prevent it, should the opportunity arise, from using any future cross-border natural gas pipelines which may interconnect with Sur de Texas Tuxpan. Granting such request is consistent with approvals that DOE/FECM has issued under similar circumstances.[16] Applicant further requests that the DOE/FECM not require Applicant to file a subsequent application for supplemental authorization if new or expanded U.S. pipelines are constructed in the future that Applicant could use to export natural gas up to Applicant's requested export volume.

Applicant seeks to export (or re-export, as applicable) the requested volumes on its own behalf and as agent for other entities that hold title to the natural gas at the time it is exported to Mexico and/or to the U.S.-sourced natural gas at the time it is re-exported as LNG from Mexico, to the extent applicable, pursuant to long-term agreements. Applicant will comply with all DOE/FECM requirements for exporters and agents, including all registration requirements. When acting as agent, Applicant will register with DOE/FECM each natural gas or LNG title holder for which Applicant seeks to export as agent. Such registrations will include the registrant's agreement to comply with any order issued by DOE/FECM under which exports are made and all applicable requirements of DOE's regulations at 10 C.F.R. Part 590, including but not limited to destination restrictions.

As noted above, Applicant may obtain title to the volumes of U.S.-sourced natural gas in the United States or it may purchase natural gas in Mexico from upstream suppliers that have

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[16] *See, e.g., Energía Costa Azul, S. de R.L. de C.V.*, 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, DOE/FE Order No. 4365, at 32-33, FE Docket No. 18-145-LNG (Mar. 29, 2019).

exported the U.S.-sourced natural gas under the supplier's own FTA export authorization or under Applicant's export authorization, with Applicant acting as agent. Applicant requests that DOE/FECM affirm that, consistent with prior authorizations granted under similar circumstances, the registration requirements established by DOE/FECM will apply only in circumstances where Applicant exports natural gas from the United States or re-exports LNG from Mexico on behalf of an entity that holds title to the natural gas or LNG at the time that Applicant exports it or re-exports it, respectively. If natural gas is exported or LNG is re-exported by a person or entity other than Applicant pursuant to a different authorization issued by DOE/FECM, the terms of that other authorization will govern the registration requirements that apply. Applicant further requests that DOE/FECM affirm that registration will not be required for purchases of natural gas originating in Mexico where the purchase was not part of an arrangement to export the natural gas from the United States on behalf of the purchaser.

V.
COMMERCIAL AGREEMENTS

Applicant has not entered into any natural gas supply or LNG export contracts specific to the authorization requested herein. As reflected above, Valley Crossing provides interconnectivity with multiple interstate and intrastate pipelines which will enable Applicant to access a wide diversity of gas supplies from throughout the U.S. pipeline grid. As also noted, Applicant is in the process of entering into agreements with CFE to use its existing capacity on the Valley Crossing and Sur de Texas Tuxpan pipelines.[17]

[17] CFE currently holds blanket export authorization from DOE/FECM to import and export natural gas from and to Mexico. *See CFE International LLC*, Order Granting Blanket Authorization to Import and Export Natural Gas From and To Mexico, DOE/FE Order No. 4662, FE Docket No. 21-16-NG (Feb. 11, 2021).

The Applicant will engage in exports on its own behalf or as agent, and another wholly-owned subsidiary of NFE will own and operate the Project. Through its affiliates, NFE anticipates that it will purchase and transport natural gas, offload produced LNG into an FSU, and transload such LNG onto ocean going LNG carriers for distribution to its downstream terminals or third-party customers. Consistent with DOE/FECM's prior practice, Applicant will file any transaction-specific long-term contracts with DOE/FECM as they are entered into.[18]

Upon entering into such contracts, Applicant will file, or cause to be filed, either unredacted contracts, or long-term contracts 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.[19]

VI.
APPLICABLE LEGAL STANDARD AND PUBLIC INTEREST ANALYSIS

A. Exports to FTA Nations

Under Section 3(c) of the NGA, Applicant's request for authorization to export natural gas to Mexico and to re-export LNG from Mexico to FTA Nations should be granted expeditiously, as such exports are statutorily held to be in the public interest. Section 3(c) of the NGA states "the exportation of natural gas to a nation with which there is in effect a free trade agreement requiring

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[18] 10 C.F.R. § 590.202(b). *See, e.g. Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC*, Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, DOE/FECM Order No. 4799, Docket No. 19-124-LNG (Mar. 16, 2022) (*hereinafter* "Order No. 4799"); *Sabine Pass Liquefaction, LLC*, Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, DOE/FECM Order No. 4800, Docket No. 19-125-LNG (Mar. 16, 2022) (*hereinafter* "Order No. 4800").

[19] *Order No. 4799*, at 69; *Order No. 4800*, at 70.

national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such … exportation shall be granted without modification or delay."[20]

Given this clear standard, Applicant's request for authorization to export natural gas to Mexico and to re-export LNG to all other FTA Nations should thus be deemed to be consistent with the public interest and granted without modification or delay.

B. Exports to Non-FTA Nations

Section 3(a) of the NGA governs Applicant's request for authorization to export LNG to Non-FTA Nations, requiring that the Secretary of Energy "shall issue such [authorization] unless, after opportunity for hearing, it finds that the proposed exportation … will not be consistent with the public interest."[21] Section 3(a) creates a clear presumption in favor of finding LNG exports in the public interest unless there is a showing to the contrary, as noted by both DOE/FECM and the United States Court of Appeals for the District of Columbia ("D.C. Circuit").[22]

To evaluate the public interest, DOE developed policy guidelines in 1984 that were "designed to establish natural gas trade on a market-competitive basis and to provide immediate as well as long-term benefits to the American economy."[23] The goals of these guidelines were twofold: to "minimize federal control and involvement in energy markets, and [t]o promote a

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[20] 15 U.S.C. § 717b(c).

[21] *Id.* § 717b(a).

[22] *See e.g., Order No. 4800*, at 26; *Sierra Club v. DOE*, 867 F.3d 189, 203 (D.C. Cir. 2017) ("We have construed [NGA section 3(a)] as containing a 'general presumption favoring [export] authorization.'") (quoting *W. Va. Pub. Servs. Comm'n v. DOE*, 681 F.2d 847, 856 (D.C. Cir. 1982)).

[23] 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. 6,684 (Feb. 22, 1984).

balanced and mixed energy resource system."[24] While the guidelines were developed with regard to LNG imports, DOE subsequently held that they applied to exports as well.[25]

Historically, DOE has relied upon a number of significant considerations relevant to its public interest evaluation:

> (i) the domestic need for the natural gas 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, such as international and environmental impacts.[26]

In this regard, and as described below, Applicant's contemplated LNG exports should not be found inconsistent with, but rather should be recognized as supportive of, the public interest. As detailed herein, forecasts for domestic supply and demand in the U.S. natural gas market clearly show that the volumes proposed to be exported in this Application are not needed by the U.S. market. The exports proposed herein will foster competition in the market and are consistent with international trade commitments and global energy security needs. Accordingly, Applicant's request for authorization to export LNG to Non-FTA Nations should be granted.

1. *Domestic Impacts*

Current and future projections for the supply and demand of domestically-produced natural gas show that the U.S. market can easily accommodate Applicant's proposed exports. Natural gas production in the U.S. is at its highest level ever, increasing approximately 50% in the last 10 years,

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[24] *Id*. at 6,685.

[25] *Phillips Alaska Natural Gas Corporation and Marathon Oil Company*, 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) (citing *Yukon Pacific Corporation*, DOE Opinion and Order No. 350, 1 FE ¶ 70,259, at 71,128 (1989)).

[26] *Order No. 4800*, at 28.

and 2021 showed the highest amount of production ever recorded.[27] Consistent with recent trends, the latest published Short-Term Energy Outlook ("STEO") from the U.S. Energy Information Administration ("EIA") forecasts "U.S. dry natural gas production to average 97.1 Bcf/d in August and 96.6 Bcf/d during all of 2022, which would be 3.0 Bcf/d (3%) more than in 2021 [and] … dry natural gas production to average 100.0 Bcf/d in 2023."[28]

EIA has and continues to project this growth trend will continue. In the 2022 Annual Energy Outlook ("AEO 2022"), EIA forecasted that, by 2050, natural gas production would grow "approximately twice as fast as consumption" with around "***25% more natural gas… produced than consumed*** in the United States."[29] The EIA further anticipates that the demand for U.S. natural gas will "exceed current and announced LNG export capacity," specifically highlighting the need and demand for additional LNG export facilities.[30] As DOE/FECM itself recently noted, "EIA's projections in AEO 2022 continue to show market conditions that will accommodate increased exports of natural gas" and "project[] increases in domestic natural gas production—well in excess of what is required to meet projected increases in domestic consumption.."[31]

Similarly, DOE-commissioned studies continue to support the finding that LNG exports are in the public interest. The 2018 DOE-commissioned study on the potential macroeconomic impacts of LNG exports made a number of key findings, including:

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[27] U.S. Energy Info. Admin., *U.S. Natural Gas Marketed Production* (Jul. 29, 2022), *available at* http://www.eia.gov/dnav/ng/hist/n9050us2A.htm.

[28] U.S. Energy Info. Admin., *Short Term Energy Outlook August 2022, Natural Gas* (Aug. 9, 2022), *available at* https://www.eia.gov/outlooks/steo/pdf/steo_text.pdf.

[29] U.S. Energy Info. Admin., *Annual Energy Outlook 2022 with projections to 2050 – Narrative*, at p. 26 (Mar. 3, 2022), *available at* http://www.eia.gov/outlooks/aeo/pdf/AEO2022_Narrative.pdf.

[30] *AEO 2022*, at p. 28.

[31] *Magnolia LNG LLC*, Order Amending Long-Term Authorization to Export Liquefied Natural Gas To Non-Free Trade Agreement Nations, DOE/FECM Order No. 3909-C, at 45, Docket No. 13-132-LNG (Apr. 27, 2022) (*hereinafter* "Order No. 3909-C").

- "Even the most extreme scenarios of high LNG exports that are outside the more likely probability range … show higher overall economic performance in terms of GDP, household income, and consumer welfare than lower export levels associated with the same domestic supply scenarios."[32]
- "Increasing U.S. LNG exports under any given set of assumptions about U.S. natural gas resources and their production leads to only small increases in U.S. natural gas prices."[33]
- "[N]atural gas intensive sectors [of industry] continue to grow robustly at higher levels of LNG exports[.]"[34]
- "Increased exports of natural gas will improve the U.S. balance of trade and result in a wealth transfer into the U.S."[35]

DOE/FECM has previously highlighted these findings[36] and determined them to be substantial support for authorizing exports to Non-FTA Nations, noting that "the principal conclusion of the 2018 LNG Export Study is that the United States will experience net economic benefits from the export of domestically produced LNG."[37] In this regard, DOE/FECM has relied on these conclusions as indicative of LNG exports being in the public interest.[38] DOE has

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[32] NERA Econ. Consulting, *Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports*, at p. 21 (Jun. 7, 2018) ("2018 LNG Export Study"), *available at* https://www.energy.gov/sites/prod/files/2018/06/f52/Macroeconomic%20LNG%20Export%20Study%202018.pdf.

[33] *Id.* at p. 55.

[34] *Id.* at p. 70.

[35] *Id.* at p. 64.

[36] Study on Macroeconomic Outcomes of LNG Exports: Response to Comments Received on Study, 83 Fed. Reg. 67,251, 67,272-73 (Dec. 28, 2018).

[37] *Order No. 3909-C*, at 15

[38] *Id*. at 15-16.

"advanced its commitment to promoting clean energy, job creation, and economic growth by approving additional exports of domestically produced natural gas" and such approval "furthers [a] commitment to promoting energy security and diversity worldwide."[39]

Finally, increased exports have positive financial implications for the United States. DOE/FECM has noted that over the term of an export authorization "the proposed exports will improve the United States' ties with its allies and trade partners and make a positive contribution to the United States' trade balance."[40] DOE/FECM has further held that "U.S. households benefit from the additional wealth transferred into the United States, which increases the value of the dollar and reduces prices of other imported goods."[41] Furthermore, the proposed exports and associated Project are anticipated to result in approximately $121 million annually in taxes paid in the United States.

2. *International Impacts*

As DOE/FECM has made clear, "foreign policy and trade impacts to the United States of exports are factors bearing on" the public interest review and "an 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."[42]

Throughout the beginning of 2022, the security, reliability, and stability of global energy supplies have become an even greater matter of national interest and international significance.

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[39] U.S. Dep't of Energy, *Department of Energy Authorizes Additional LNG Exports from Freeport LNG* (May 29, 2019) (internal quotation marks omitted), *available at* https://www.energy.gov/articles/department-energy-authorizes-additional-lng-exports-freeport-lng.

[40] *Golden Pass LNG Terminal LLC*, Order Amending Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, DOE/FECM Order No. 3978-E, at 376, Docket No. 12-156-LNG (Apr. 27, 2022) (*hereinafter* "Order No. 3978-E"); *see also Order No. 3909-C*, at 49.

[41] *Order No. 3978-E*, at 36; *see also Order No. 3909-C*, at 48.

[42] *Order No. 3909-C*, at 53.

Enhancing energy security and justice by providing a politically and economically stable source of natural gas supply is more important than ever amid today's geopolitical uncertainty and destabilized global energy markets. The ongoing international conflict in Ukraine has further highlighted the need for the United States to assist its European allies in reducing their dependence on Russian energy sources.[43] U.S.-sourced gas and resultant LNG exports comprise a key alternative to many of the United States' allies' traditional energy suppliers, including Russia. As an energy transition company supplying customers around the world, NFE has observed with grave concern the ongoing Russia-Ukraine conflict and its destabilizing effects on regional and global energy security, in addition to the tragic loss of life, distress, and civil injustice resulting from an unprovoked encroachment on a nation's sovereignty.

The exports proposed herein are consistent with the goal of providing alternative supply sources, as well as the energy regulatory agenda and international commitments made by the current administration. On March 25, 2022, President Biden announced a joint Task Force with the European Commission "to reduce Europe's dependence on Russian fossil fuels and strengthen European energy security."[44] In this regard, the United States has committed to "[d]iversifying liquefied natural gas (LNG) supplies" and to "strive to ensure additional LNG volumes for the [European Union] market of at least 15 bcm in 2022, with expected increases going forward."[45]

Consistent with the administration's commitment, DOE/FECM has recognized in recent orders that by authorizing exports to Non-FTA Nations, including to U.S. allies in Europe and

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[43] CBS News, *U.S. to boost natural gas deliveries to help wean Europe off Russian* energy (Mar. 25, 2022), *available at* https://www.cbsnews.com/news/biden-europe-us-ukraine-russia-liquified-natural-gas-lng-taskforce/.

[44] White House Briefing Room, FACT SHEET: United States and European Commission Announce Task Force to Reduce Europe's Dependence on Russian Fossil Fuels (March 25, 2022), *available at* www.whitehouse.gov/briefing-room/statements-releases/2022/03/25/fact-sheet-united-states-and-european-commission-announce-task-force-to-reduce-europes-dependence-on-russian-fossil-fuels/.

[45] *Id*.

elsewhere, the United States can "help mitigate energy security concerns" of our allies and trading partners.[46] Accordingly, DOE/FECM has found that authorizing requested exports advances the public interest for reasons that are "distinct from and additional to the economic benefits identified in the 2018 LNG Export Study and DOE's prior macroeconomic studies."[47]

Therefore, for the foregoing reasons, the export authorization requested herein is not inconsistent with, and clearly serves and advances, the public interest and should be approved at the earliest date possible.

VII.
ENVIRONMENTAL IMPACTS

A. DOE/FECM's Environmental Impact Review

In the past, DOE/FECM has concluded that in instances where an applicant proposes to utilize export facilities such as those proposed by the Applicant's affiliate, Mexico FLNG S. de R.L. de C.V., which require no construction of facilities within the United States, and proposes to utilize capacity on existing cross-border pipelines, such applications are categorically excluded from all environmental review pursuant to the National Environmental Policy Act ("NEPA").[48] Recognizing recent changes in policy, Applicant understands that DOE/FECM is likely to prepare

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46 *Order No. 3909-C*, at 53.

47 *Id*.

48 *See, e.g., Epcilon LNG LLC,* 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, DOE/FE Order No. 4629, FE Docket No. 20-31-LNG (Dec. 8, 2020); *Energía Costa Azul, S. de R.L. de C.V.*, 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), DOE/FE Order No. 4365, FE Docket No. 18-145-LNG (Mar. 29, 2019); *Mexico Pacific Limited LLC*, 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, DOE/FE Order No. 4312, FE Docket No. 18-70-LNG (Dec. 14, 2018).

an Environmental Assessment ("EA"),[49] and looks forward to cooperating with DOE/FECM during this process in order to facilitate a timely environmental review.

Applicant's affiliate proposes to construct the Project offshore in the territorial waters of Mexico. As further discussed below, the environmental impacts from the proposed Project will be subject to a thorough review by Mexican regulatory authorities. The Project will undergo a robust environmental and social impact review that is similar to the requirements imposed by NEPA. Additionally, the Applicant proposes to export natural gas to Mexico via the cross-border Valley Crossing Pipeline, which was authorized by the Federal Energy Regulatory Commission ("FERC") pursuant to section 3 of the NGA.[50] Prior to issuing its authorization, FERC reviewed the environmental impacts from the Valley Crossing Pipeline and developed an EA,[51] and a similar review would be conducted for any new FERC jurisdictional border-crossing pipelines that may be proposed in the future. Therefore, DOE/FECM has no obligation to perform a NEPA analysis with respect to the impacts from natural gas transported by the Valley Crossing Pipeline, or any future FERC-permitted border-crossing pipeline. Doing so would unnecessarily duplicate the review conducted by FERC.

To satisfy DOE/FECM's obligations under NEPA with respect to the proposed exports, DOE/FECM should only conduct a limited review in preparing an EA. DOE/FECM has recognized in similar proceedings that its environmental review should include four primary

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[49] Recently, in somewhat similar circumstances, DOE/FECM has noted that the President's Executive Order *Tackling the Climate Crisis at Home and Abroad*, E.O. 14008, 86 Fed. Reg. 7,619 (Feb. 1, 2021) and the Council on Environmental Quality's ("CEQ") recently-updated regulations for implementing NEPA warrant the preparation of an EA. *See Energía Costa Azul, S. de R.L. de C.V.*, Notice of Environmental Assessment, Docket No. 18-145-LNG, at 5 (Jul. 12, 2022); *Vista Pacifico LNG S.A.P.I. de C.V.*, Notice of Environmental Assessment, Docket No. 20-153-LNG, at 5 (Jul. 12, 2022).

[50] *Valley Crossing Pipeline, LLC*, 161 FERC ¶ 61,084 (2017).

[51] *Id.* at PP 27-30.

topics: (1) the potential environmental impacts associated with production of U.S.-sourced natural gas in the lower-48 states using DOE's *Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States* ("2014 Addendum");[52] (2) incorporation of the environmental review conducted by FERC for the existing cross-border pipeline that will be utilized to export natural gas to Mexico; (3) a description of Mexico's environmental review process for construction and operation of the Project; and (4) the global nature of GHG emissions associated with re-exporting U.S.-sourced LNG from Mexico from a life cycle perspective, using DOE's two life cycle greenhouse gas ("GHG") reports in this proceeding.

B. Permitting and Environmental Impact Review by The Government of Mexico

The proposed Project will be constructed and operated wholly within Mexico and its territorial waters.[53] Therefore, the Project will be subject to environmental review and permitting requirements under Mexican federal laws, and will undergo a fulsome review similar to the review conducted under NEPA. DOE/FECM has recently stated its intent to consider Mexico's environmental review process when preparing an EA in other export proceedings for the purpose of completeness.[54] Detailed information regarding the required environmental and social permits for the Project is attached hereto as Appendix E, and an overview of anticipated operational emissions for the Project is attached hereto as Appendix F.

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[52] 79 Fed. Reg. 48,132 (Aug. 15, 2014) .

[53] The Project is proposed at 22°39'18.0"N, 97°40'42.6"W. These coordinates will be included in the applications submitted to the Mexican regulatory agencies for review and approval of the Project. Approval of the Project by the Mexican regulators includes authorization to site the Project at these coordinates.

[54] *See Energía Costa Azul, S. de R.L. de C.V.*, Notice of Environmental Assessment, Docket No. 18-145-LNG, at 6 n.32 (Jul. 12, 2022), *Vista Pacific LNG, S.A.P.I. de C.V.*, Notice of Environmental Assessment, Docket No. 20-153-LNG, at 5 n.28 (Jul. 12, 2022).

Mexico's primary statute governing the environmental review process is *Ley General del Equilibrio Ecológico y la Protección al Ambiente* (General Law of Ecological Balance and Environmental Protection, or "LGEEPA").[55] Administration of LGEEPA with respect to the Project is delegated to the *Agencia Nacional de Seguridad Industrial y de Protección al Medio Ambiente del Sector Hidrocarburos* (National Agency for Industrial Security and Environmental Protection for the Hydrocarbon Industry, or "ASEA") within the *Secretaría de Medio Ambiente y Recursos Naturales* (Ministry of Environmental and Natural Resources).[56] ASEA has jurisdiction over industrial, operational, and environmental safety review for the construction of natural gas pipelines and LNG facilities.[57]

Applicant's affiliate will prepare a *Manifestación de Impacto Ambiental* (Environmental Impact Assessment, or "MIA") and an *Estudio de Riesgo Ambiental* (Environmental Risk Assessment) application, assessing potential environmental impacts, operational hazards and mitigation of such impacts and hazards, associated with all phases of the Project, including site preparation, construction, operation, maintenance, and decommissioning.[58] The MIA/ERA application includes the following information: (i) general information about the project, the proponent and the person responsible for the environmental impact study; (ii) a description of the works or activities and, if applicable, of the partial development programs or plans; (iii) a description of interdependence between the planning documents and applicable legal ordinances; (iv) a description of the regional environmental system and indication of trends in the region's

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55 *LGEEPA*, articles 1, 2 and 28-30.

56 *Ley de la Agencia Nacional de Seguridad Industrial y de Protección al Medio Ambiente del Sector Hidrocarburos* (Law of the National Agency of Industrial Safety and Environmental Protection of the Hydrocarbons Sector, or "LASEA"), articles 1, 5 & 7.

57 *Id.*

58 *LGEEPA*, articles 28, section II and article 30.

development and deterioration; (v) identification, description and evaluation of cumulative and residual environmental impacts of the regional environmental system; (vi) strategies for the prevention and mitigation of cumulative and residual environmental impacts of the regional environmental system; (vii) regional environmental forecasts and, where appropriate, evaluation of alternatives; and (viii) identification of the methodological instruments and technical elements that support the results of the environmental impact assessment.[59] As mentioned above, the MIA, prepared for a natural gas pipeline or LNG facility, must also contain an Environmental Risk Assessment that separately assesses safety and risk mitigation procedures.[60]

Based on the MIA and the Environmental Risk Assessment application, Applicant's affiliate will request ASEA's Environmental Impact Authorization ("EIA") and Environmental Risk Authorization ("ERA") for the Project. During its review, ASEA will provide notice to, and consider comments from, the public and various federal agencies. If, based on the outcome of this review, ASEA finds that the project is environmentally viable, it will issue a resolution approving the MIA and issue an EIA and ERA containing the compulsory terms and conditions, including mitigation measures, of the authorization. ASEA retains jurisdiction over the enforcement of, and compliance with, the terms and conditions of the EIA and ERA, as well as a Project's continued compliance with applicable laws, regulations, and conditions. Applicant's affiliate will have to apply for approval of its *Sistemas de Administración de Seguridad Industrial,*

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[59] Gobierno de México, Agencia de Seguridad, Energía y Ambiente, *Autorización de la MIA Particular del Sector Hidrocarburos, incluye actividades altamente riesgosas* (last accessed Aug. 25, 2022), *available at* https://www.gob.mx/tramites/ficha/autorizacion-de-la-mia-particular-del-sector-hidrocarburos-incluye-actividades-altamente-riesgosas/ASEA4488.

[60] *LGEEPA*, articles 28, section II and article 30.

Seguirdad Operativa y Protección (Industrial, Operational, and Environmental Safety Management System).[61]

In addition to acquiring permits and authorizations from the Mexican government for *environmental* and safety matters, Applicant's affiliate also must perform an *Evaluación de Impacto Social* (Social Impact Assessment, or "EVIS"), which discloses the potential *social* impacts caused by the Project, and propose a social management plan.[62] The review and approval of the Applicant's EVIS is governed by the *Secretaría de Energia* (Ministry of Energy). In addition, Applicant's affiliate must also obtain individual permits for liquefaction, electricity generation, gas transportation by pipeline and storage of natural gas in Mexico from the *Comision Reguladora de Energia* (Energy Regulatory Commission).[63]

The Applicant's affiliate intends to submit all applications necessary for the permits and authorizations described herein and in Appendix E, concurrent with or soon after the filing of the instant application.

C. FERC Environmental Review

Applicant proposes to export natural gas to Mexico via the Valley Crossing Pipeline.[64] Prior to authorizing the Valley Crossing Pipeline, FERC staff completed a thorough environmental review of the project and concluded that the project would not result in significant impacts.[65]

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61 *LASEA*, articles 12 and 13.

62 *Ley de Hidrocarburos* (Hydrocarbons Law, or "LH"), article 121.

63 *LH*, article 48; *Ley de la Industria Eléctrica* (Power Industry Law, or "LIE"), article 17.

64 As discussed herein, Applicant seeks to maintain optionality in its export authorization regarding the point of export, and also seeks authorization to export via any future cross-border pipelines that may be constructed, independent of the Project, which interconnect with Sur de Texas Tuxpan.

65 *See Valley Crossing Pipeline, LLC*, Border Crossing Project Environmental Assessment, Docket No. CP17-19-000 (Jun. 30, 2017).

FERC, not DOE, has exclusive jurisdiction over the siting and approval of natural gas pipeline facilities under the NGA. Thus, DOE/FECM should not undertake efforts to duplicate the reviews already conducted by FERC, but rather, the EA should take into account only the environmental review previously performed by FERC for the Valley Crossing Pipeline to the extent relevant.

It is not anticipated that the proposed exports will require any new construction or expansions of U.S. pipeline facilities. However, the possibility of future expansion or construction of cross-border facilities should not be included in DOE/FECM's environmental analysis. DOE/FE had previously found in *Bear Head LNG Corp. and Bear Head LNG (USA), LLC* that "[i]nsofar as such capacity expansions may result proximately from the issuance of export authorizations by this agency, DOE/FE is responsible for evaluating the impacts of the capacity expansion" under NEPA.[66] However, DOE/FE's conclusion in *Bear Head* is no longer sound. A year after *Bear Head*, the D.C. Circuit concluded with respect to FERC's NEPA review, "the [DOE's] independent decision to allow exports—a decision over which the Commission has no regulatory authority—breaks the NEPA causal chain and absolves [FERC] of responsibility to include in its NEPA analysis considerations that it 'could not act on' and for which it cannot be 'the legally relevant cause.'"[67] The reverse is also true, and DOE/FECM is not required to include in its NEPA analysis for the Project such speculative future actions, which are within the exclusive jurisdiction of FERC to approve.

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[66] *Bear Head LNG Corp. and Bear Head LNG (USA), LLC*, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export U.S.-Sourced Natural Gas by Pipeline to Canada for Liquefaction and Re-Export in the Form of Liquefied Natural Gas to Non-Free Trade Agreement Countries, DOE/FE Order No. 3770, at 157, FE Docket No. 15-33-LNG (Feb. 5, 2016) (hereinafter "*Bear Head*").

[67] *See Sierra Club v. FERC*, 827 F.3d 36, 48 (D.C. Cir. 2017) (quoting *Pub. Citizen v. Dep't of Tansp.*, 541 U.S. 752, 769 (2004)).

D. DOE Addendum & GHG Life Cycle Analyses

The final aspect necessary to complete DOE/FECM's environmental review of the requested authorization is to incorporate into this proceeding its supplemental environmental reports, including the 2014 Addendum, the Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States[68] and the Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States: 2019 Update.[69] Incorporation of these documents in its EA will satisfy DOE/FECM's obligations under NEPA. Although these materials demonstrate that there are potential environmental issues associated with unconventional natural gas production and end-use, DOE/FECM should find that the authorization as proposed will not significantly impact the quality of the human environment under NEPA, and that such authorization satisfies the public interest standard in section 3 of the NGA.

DOE has recognized that although the current rapid development of natural gas resources in the United States will continue, with or without the export of natural gas to Non-FTA Nations, such authorizations could accelerate development of natural gas resources "by some increment."[70] While Applicant recognizes that DOE/FECM is likely to prepare an EA for the proposed exports due to recent changes in the regulatory landscape, including the updated CEQ regulations, DOE/FECM should recognize that upstream impacts are not reasonably foreseeable effects of the export authorization requested herein. As Applicant has identified the Valley Crossing Pipeline as the cross-border transporter of natural gas, the Applicant will have access to natural gas supply

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[68] Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States, 79 Fed. Reg. 32,260 (Jun. 4, 2014) (*hereinafter* "2014 LCA GHG Report").

[69] U.S. Dep't of Energy, 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) (*hereinafter* "2019 LCA Update").

[70] *Order No. 3909-C*, at 55.

from numerous production basins throughout the United States, and localized impacts from induced natural gas production are not reasonably foreseeable. Thus, incorporation of the 2014 Addendum will appropriately address potential impacts from export-induced production.

DOE's 2014 Addendum broadly analyzed issues associated with natural gas production including impacts to water resources, air quality, GHG emissions, induced seismicity, and land use.[71] The D.C. Circuit has upheld DOE's use of the 2014 Addendum to satisfy its obligations under NEPA, as opposed to linking specific projects to impacts from natural gas production where, like here, the location of such production is unknown.[72] Rather than ignore the potential impacts of increased natural gas production, DOE's 2014 Addendum rightly assumes that production could occur anywhere and "considered impacts that may be felt regardless of where they occur[.]"[73] The D.C. Circuit concluded that it could not say that DOE's use of the 2014 Addendum "failed to fulfill its obligations under NEPA by declining to make specific projections about environmental impacts stemming from specific levels of export-induced gas production."[74]

Likewise, downstream emissions impacts are not reasonably foreseeable impacts of the requested export authorization, and DOE's 2014 LCA GHG Report and 2019 LCA Update satisfy DOE's obligations under NEPA. The 2014 LCA GHG Report assessed the life cycle—from wellhead to power plant—of GHG emissions associated with electricity generated using U.S. LNG in Europe and Asia, and compared these with emissions from electricity generated from coal or other sources.[75] Both the 2014 LCA GHG Report and the 2019 LCA Update conclude that

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71 *Order No. 3909-C*, at 55 (discussing the 2014 Addendum).

72 *See Sierra Club v. DOE*, 867 F.3d 189, 199 (D.C. Cir. 2017).

73 *Id.* at 201.

74 *Id.*

75 *Id.* at 196.

exporting U.S. LNG to produce power in Europe and Asia would not increase GHG emissions from a life cycle perspective when compared to regional coal extraction and consumption for electricity production, and may even reduce global GHG emissions on a per unit basis where U.S. LNG exports are preferred over coal.[76] Moreover, the D.C. Circuit has upheld DOE's incorporation of the 2014 LCA GHG Report as satisfying DOE's examination of the potential downstream GHG emissions resulting from the transport and usage of U.S. LNG abroad.[77]

Although the CEQ's updated regulations at 40 C.F.R. § 1508.1 provided a new definition of "effects", this does not change DOE/FECM's analysis under NEPA, which has been scrutinized and upheld by reviewing courts. Thus, incorporation of the 2014 Addendum, the 2014 LCA GHG Report and the 2019 LCA Update satisfies DOE/FECM's requirements under NEPA with respect to Applicant's request for export authorization, and DOE/FECM should conclude that such authorization as proposed will not result in significant impacts to the quality of the human environment.

VIII.
APPENDICES

Appendix A: Verification

Appendix B: Opinion of Counsel

Appendix C: Organizational Chart (Privileged and Confidential - Do Not Release)

Appendix D: Project Map

Appendix E: Mexican Permitting Overview

Appendix F: Project Operational Emissions

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[76] *Order No. 3909-C*, at 57.

[77] *Sierra Club v. DOE*, 867 F.3d at 202 (holding there was "nothing arbitrary about [DOE's] decision.").

IX.
CONCLUSION

For the foregoing reasons, and as further detailed herein, Applicant respectfully requests that DOE/FECM grant it long-term, multi-contract authorization (1) to export U.S. natural gas to Mexico in a volume equivalent to approximately 158 Bcf/y and (2) to re-export U.S.-sourced natural gas as LNG from Mexico in a volume equivalent to approximately 145 Bcf/y (equivalent to approximately 2.8 MTPA) from the Project to both FTA and Non-FTA Nations, each for a term extending through December 31, 2050. Applicant respectfully requests that this authorization be granted, at the earliest date possible and by no later than February 2023.

Respectfully submitted,

/s/Lisa M. Tonery
Lisa M. Tonery
Mariah T. Johnston
Jacob I. Cunningham
Attorneys for
NFE Altamira FLNG, S. de R.L. de C.V.

Dated: September 9, 2022

APPENDIX A

VERIFICATION

VERIFICATION

State of New York)

County of New York)

BEFORE ME, the undersigned authority, on this day personally appeared Cameron MacDougall, who, having been by me first duly sworn on oath says that he is counsel for NFE ALTAMIRA FLNG, S. DE R.L. DE C.V. and is duly authorized to make this Verification; that he has read the foregoing instrument and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

Cameron MacDougall
NFE Altamira FLNG, S. de R.L. de C.V.

SWORN TO AND SUBSCRIBED before me on the 9th day of September, 2022.

LAUREN A. DALESSIO
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 02DA6382923
Qualified in Suffolk County
Commission Expires November 5, 2022

Name: Lauren Dalessio

Title: Notary Public

My Commission expires: 11/5/22

APPENDIX B

OPINION OF COUNSEL

September 9, 2022

Office of Fossil Energy and Carbon Management
U.S. Department of Energy
Forrestal Building
1000 Independence Avenue, SW
Washington, D.C. 20585

RE: NFE Altamira FLNG, S. de R.L. de C.V.
Docket No. 22-___-LNG
Application For Long-Term, Multi-Contract Authorizations to Export Natural Gas to Mexico and to Re-export Liquefied Natural Gas from Mexico to Free Trade Agreement and Non-Free Trade Agreement Nations

Dear Sir or Madam:

This opinion of counsel is provided in accordance with the requirements of Section 590.202(c) of the U.S. Department of Energy's regulations.[1] I have examined the incorporation documentation of NFE Altamira FLNG, S. de R.L. de C.V. ("Applicant") and other authorities as necessary for this opinion, and have concluded that the proposed exportation of natural gas to Mexico, and re-export of U.S. natural gas as LNG from Mexico to other Free Trade Agreement and Non-Free Trade Agreement Nations, as described in the above-referenced application is within Applicant's corporate powers.

Respectfully submitted,

Cameron MacDougall
Counsel

[1] 10 C.F.R. § 590.202(c) (2021).

APPENDIX C

ORGANIZATIONAL CHART

CUI/PRIV

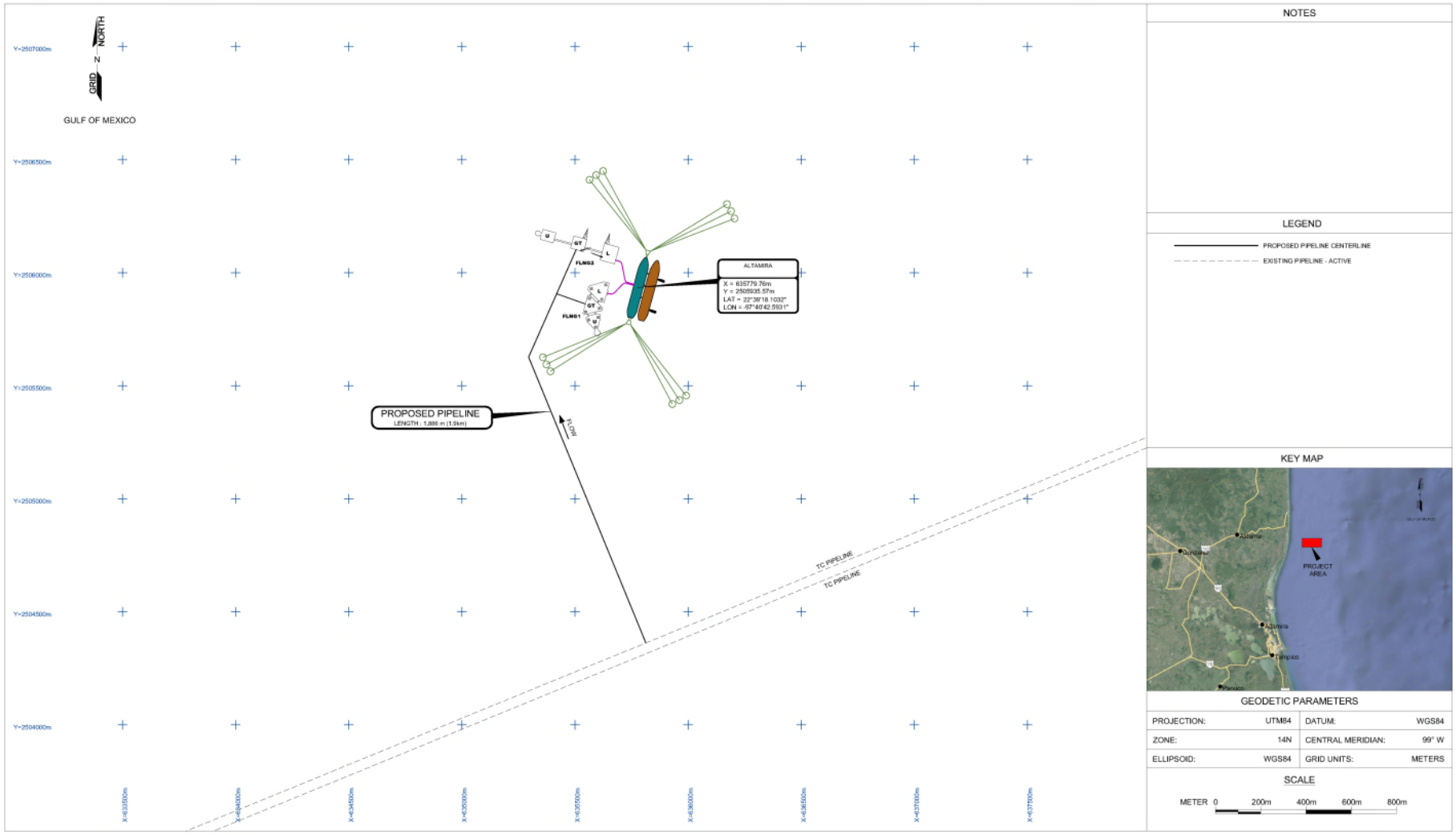
PRIVILEGED AND CONFIDENTIAL

DO NOT RELEASE

[REDACTED – CONTAINS PRIVILEGED AND CONFIDENTIAL INFORMATION]

APPENDIX D

PROJECT MAP



NOTES

LEGEND

PROPOSED PIPELINE CENTERLINE

EXISTING PIPELINE - ACTIVE

KEY MAP

GEODETIC PARAMETERS

PROJECTION:	UTM84	DATUM:	WGS84
ZONE:	14N	CENTRAL MERIDIAN:	99° W
ELLIPSOID:	WGS84	GRID UNITS:	METERS

SCALE

METER 0 200m 400m 600m 800m

APPENDIX E

MEXICAN PERMITTING OVERVIEW

I. Overview and Structure

This Appendix summarizes and provides a general overview of the permitting application process required for the Project in Mexico, as well as an outline of the environmental and social permits related to the hydrocarbons sector. Specifically, this Appendix outlines and describes the required regulatory permits regarding the construction and operation of offshore natural gas pipelines, liquefaction, and storage facilities.

Sections II and III of this Appendix include the scope of each permit to be submitted related to the Project, its application mechanics and their potential statutory processing times, in order to successfully obtain the permits and authorizations required for the development of offshore natural gas pipelines, liquefaction and storage projects. Section IV of this Appendix describes the key requirements taken into consideration by Mexican governmental agencies to grant such environmental and social permits.

II. Competent Agencies for Permitting Processes

This section describes the required permits, the governmental entities involved in their granting and their statutory resolution times, for activities in the hydrocarbons sector, including natural gas liquefaction, storage, and pipeline projects.

The Table in Section III lists all appropriate agencies, as well as the primary necessary permits, applicable to the construction and operation of offshore natural gas pipelines, storage and liquefaction projects. Depending on the purpose and scope of the project, the descriptions, requirements, timing, and sequencing of each permitting application structure will vary. While the timing of permits and authorizations are regulated under the applicable legislation, in practice it is customary for governmental authorities to take longer to issue the permits, a fact compounded by the COVID-19 pandemic and the current Federal administration.

NFE is currently finalizing all the engineering required for the construction of the Project. As a result, NFE expects to file the first permits before CRE and ASEA (as defined and outlined below) during the month of September, 2022.

It is important to mention that the Mexican Government fully supports and approves of the Project, thus NFE estimates that the timing to obtain each of the permits may be expedited.

III. Table of Permits

1. ASEA ***Agencia Nacional de Seguridad Industrial y de Protección al Medio Ambiente del Sector Hidrocarburos*** **(National Agency of Industrial Safety and Environmental Protection for the Hydrocarbon Industry)**				
Registration/ Authorization	**Applicability**	**Registration/Authorization Summary**	**Timing**	**Effective Date/Project Phase**
Environmental Impact Authorization ("**EIA**")	Storage, Liquefaction, Pipeline	An EIA is issued after ASEA determines, based on the applicant's *Manifestación de Impacto Ambiental* (Environmental Impact Assessment, or "MIA"), that the project is environmentally viable. This permit is required before site preparation and construction activities can begin. Also, obtaining the EIA is a prerequisite to obtain all other permits required to start construction. Members of the community may require a public consultation and ASEA may, as a consequence, also request a public meeting for information. Modification or expansions may necessitate the amendment of the EIA or possibly a new EIA altogether.	120 Business Days	Valid during the construction and operation of the project
Environmental Risk Authorization ("**ERA**")	Storage, Liquefaction, Pipeline	An ERA is issued in response to an applicant's *Estudio de Riesgo Ambiental* (Environmental Risk Assessment), which is submitted in conjunction with the MIA. The ERA is required for activities regarded as "highly hazardous" in the hydrocarbons sector, which includes activities involving the transportation, storage, and liquefaction of natural gas.	120 Business Days	Valid during the construction and operation of the project
Registration and Authorization of the Industrial, Operational and Environmental Protection Safety Management System ("**SASISOPA**")	Storage, Liquefaction, Pipeline	The SASISOPA is a technical tool governing all activities related to a project's operations (from construction to decommissioning). Applicants must register an Industrial SASISOPA prior to the commencement of the construction activities. Even after authorization, ASEA continually monitors for compliance and may request detailed reports on implementation of the SASISOPA.	165 Business Days	Effective for the life of the project (construction, operation and decommissioning)

Unique Regulated Registry Number ("**CURR**")	Storage, Liquefaction, Pipeline	The CURR is granted to identify the regulated party before ASEA. The CURR is an essential requirement for the authorization of an applicant's SASISOPA. An applicant must register a CURR prior to commencement of construction of the project.	15 Business Days	Required prior to commencement of construction
Accidents Prevention Program ("**PPA**")	Storage, Liquefaction, Pipeline	Outlines the possible risks and accidents that may occur during the operation of the project and includes response and mitigation measures.	90 Days	This permit is required for the operation of the project.
Comprehensive Environmental License ("**LAU**")	Storage, Liquefaction	Required for federally-regulated facilities that generate air emissions. The LAU outlines the processes that generate emissions and provides metric data on project-related emissions.	40 Business Days	This license is required for the operational stage of the project and is permanent.
Registration as a Hazardous Waste Generator	Storage, Liquefaction, Pipeline	Applicants who generate hazardous waste must be registered with ASEA, in addition to complying with certain requirements with respect to the handling of such waste.	Effective immediately	This permit is required for every stage of the project that generates hazardous waste.
Registration of the Hazardous Waste Management Plan ("**HWMP**")	Storage, Liquefaction, Pipeline	Large generators of hazardous waste (those who generate an annual volume of ten or more tons) are obligated to file and obtain the registration of their HWMP issued by ASEA.	60 Business Days	Required at any stage of the project when 10 tons or more of hazardous waste are generated.

Registration as Special Handling Wastes Generator	Storage, Liquefaction, Pipeline	Special management wastes are those generated as part of productive processes that do not have the characteristics to be considered as hazardous or solid urban wastes (domestic wastes), or are generated by large generators of urban wastes. Those who generate special management wastes in the hydrocarbons sector must register with ASEA 45 days prior to the development of any activity. Additionally, applicants must file annual reports of special management wastes generated.	20 Business Days	This permit is required for every stage of the project that generates special handling wastes.
Registration of the Special Handling Wastes Management Plan ("**SHWMP**")	Storage, Liquefaction, Pipeline	Large generators of special handling wastes (those who generate an annual volume of ten or more tons) are obligated to file and obtain the registration of their SHWMP.	60 Business Days	Required at any stage of the project when 10 tons or more of this strand of waste is generated.

2. CRE *Comisión Reguladora de Energía* (Energy Regulatory Commission)				
Registration/ Authorization	**Applicability**	**Registration/Authorization Summary**	**Timing**	**Effective Date/Project Phase**
Natural Gas Pipeline Transportation	Pipeline	For projects involving the transportation of natural gas through pipelines, the applicant must first submit a permit application to CRE. The CRE also approves the rates and terms and conditions of service, regulates and verifies compliance with technical operations, and regulates and verifies compliance with safety standards under the transportation permit.	90 Business Days	30 years from the date it was granted
Natural Gas Storage	Storage	For projects involving natural gas storage, including the use of a floating natural gas storage unit ("FSU"), the applicant must first submit a permit application to CRE. The CRE also approves the rates and terms and conditions of service, regulates and verifies compliance with technical operations, and regulates and verifies compliance with safety standards under the storage permit.	90 Business Days	30 years from the date it was granted
Liquefaction of Natural Gas	Liquefaction	For projects involving natural gas liquefaction, the applicant must first submit a permit application to CRE. The permit allows for the construction of facilities and operation of liquefaction processes.	90 Business Days	30 years from the date it was granted
Electric Power Generation	Liquefaction	For projects that intend to self-supply electric generation, the applicant must first submit a permit application to CRE. Applicants must submit information related to the project schedule, corporate structure, description of the project, the applicant's financial and technical capacity, and information on supply.	60 Business Days	30 years from the date it was granted

3. SENER ***Secretaría de Energía*** **(Secretary of Energy)**				
Registration/ Authorization	**Applicability**	**Registration/Authorization Summary**	**Timing**	**Effective Date/Project Phase**
Social Impact Assessment ("**EVIS**")	Storage, Liquefaction, Pipeline	For project activities in the hydrocarbons sector, an applicant must file an EVIS for all activities requiring a permit (storage, liquefaction, and pipeline transportation), which will be evaluated and approved by SENER before commencement of the project. The EVIS discloses the potential social impacts caused by the project and should identify and consult any indigenous communities that may be affected by the project (where applicable).	90 Business Days	Effective for the life of the project

4. SEMAR *Secretaría de Marina* (Marine Secretary)				
Registration/ Authorization	**Applicability**	**Registration/Authorization Summary**	**Timing**	**Effective Date/Project Phase**
Authorization for the construction of maritime works, dredging and occupation of the seabed for the natural gas marine liquefaction platform and marine pipeline.	Storage, Liquefaction, Pipeline	The development of works occupying the marine soil and dredging activities requires an authorization which includes the construction of the works, dredging required for the construction and occupation of the seabed.	90 Calendar Days	This permit will be required for construction and occupation of the seabed, for the entire lifetime of the project.
Off Port Permit	Storage, Liquefaction, Pipeline	An applicant must receive a permit from SEMAR for other LNG carriers to arrive at the facilities and dock in order to load the LNG.	90 Calendar Days	20 years from the date it was granted

5. CONAGUA ***Comisión Nacional del Agua*** **(National Water Commission)**				
Registration/ Authorization	**Applicability**	**Registration/Authorization Summary**	**Timing**	**Effective Date/Project Phase**
Surface Water Use Concession	Storage, Liquefaction	An applicant must receive a permit from CONAGUA in order to use ocean water for project facilities (required only if such water will be destined to desalinization).	60 Business Days	Between 5-30 years
Wastewater discharge permit	Storage, Liquefaction	An applicant must receive a permit from CONAGUA in order to discharge wastewater into the ocean.	60 Business Days	Between 5-30 years

IV. Environmental Permits

This section outlines the Federal environmental permits required to start construction and undertake operational activities of an offshore gas pipeline, liquefaction and storage project in Mexico.

Environmental Impact Assessment (Federal)

The backbone of Mexico's environmental legislation is the *Ley General del Equilibrio Ecológico y la Protección al Ambiente* (General Law of Ecological Balance and Environmental Protection, or "LGEEPA"), enacted in 1988, which sets forth the main environmental policies, statutes and instruments, designed to address the different environmental impacts brought by project development and national policies.

At the federal level, permits provided by the LGEEPA are overseen by the *Secretaría de Medio Ambiente y Recursos Naturales* (Ministry of Environment and Natural Resources, or "SEMARNAT"), while the *Procuraduría Federal de Protección al Ambiente* (Environmental Attorney's Office, or "PROFEPA") is the enforcement agency of SEMARNAT, tasked with overseeing the compliance aspects of the LGEEPA.

Following the 2014 energy reform, the Federal government created the *Agencia Nacional de Seguridad Industrial y de Protección al Medio Ambiente del Sector Hidrocarburos* (National Agency of Industrial Safety and Environmental Protection of the Hydrocarbon Sector, or "ASEA"), which is a decentralized agency ascribed to SEMARNAT, that is responsible for overseeing industrial, operational and environmental safety for projects related to the hydrocarbons sector, including the construction of natural gas pipelines and liquefaction facilities.

Pursuant to Article 28 of the LGEEPA, the construction, operation and decommissioning of the abovementioned natural gas facilities, requires an environmental impact authorization ("EIA") issued by ASEA. The EIA will be issued after examination by ASEA of an environmental impact assessment ("MIA"), in which: (i) the environmental impacts associated with the entire life cycle of the project; (ii) necessary measures to mitigate or compensate the identified impacts; and (iii) compliance with applicable Mexican laws, regulations and standards (at the federal, state and municipal level), including zoning laws and requirements, are identified.

The contents of the MIA are standardized by ASEA and include; (i) general information about the project, the proponent and the person responsible for the environmental impact study; (ii) description of the works or activities and, if applicable, of the partial development programs or plans; (iii) interdependence between the planning documents and applicable legal ordinances; (iv) description of the regional environmental system and indication of trends in the region's development and deterioration; (v) identification, description and evaluation of cumulative and residual environmental impacts of the regional environmental system; (vi) strategies for the prevention and mitigation of cumulative and residual environmental impacts of the regional

environmental system; (vii) regional environmental forecasts and, where appropriate, evaluation of alternatives; and (viii) identification of the methodological instruments and technical elements that support the results of the MIA.

All the above points should relate to all stages of the project including site preparation, construction, operation, decommissioning and abandonment. The MIA should include the results of comprehensive analyses and environmental studies, as well as an assessment of mitigation and compensation measures, often based on the following: seabed composition, ocean water chemical composition, biological resources in the seabed, visual impact, waste water handling, hazardous materials handling, firefighting systems, noise levels and worker safety.

The EIA process also provides an opportunity for interested third parties, such as communities, competitors and non-governmental organizations to participate in the assessment process, which is widely publicized by notices published in ASEA's "Ecological Gazette", and in newspapers with broad circulation in the region where the project will be developed. In addition, ASEA solicits and considers comments from various government agencies (including CRE, SENER, state and municipal governments, *etc.*).

After the assessment process is finalized, an EIA will be issued by ASEA if the project is deemed environmentally sound and consistent with applicable legislation. ASEA is also tasked with the compliance and enforcement aspects of an EIA and other applicable permits and legislation, routinely undertaking inspection visits to this end and levying economic penalties, suspension orders or even site closures, when irregularities are detected.

Environmental Risk Assessment (Federal)

Pursuant to Article 30 of the LGEEPA, if a project involves highly hazardous activities (*i.e.*, when significant amounts of hazardous substances are handled, stored, used, or generated), such as in the hydrocarbons sectors, the MIA presented to ASEA must also include an Environmental Risk Assessment for analysis.

As described in Mexican legislation, the Environmental Risk Assessment is an analytical tool designed to foresee the likelihood or probability of an adverse outcome or event, due to the handling of hazardous materials, reflecting on how such outcomes will impact the surrounding environment and populations (including workers present on site).

The Environmental Risk Assessment must incorporate all preventive measures and scenarios based on technical studies (such as fault-tree analyses, HAZOP run tests, *etc.*) to identify possible catastrophic scenarios, High Risk and Buffer Zones, and safety measures to prevent or mitigate such adverse scenarios.

In addition, pursuant to Article 147 of the LGEEPA, highly hazardous activities (such as

the operation of a natural gas storage, liquefaction and pipeline facility) must file an Accidents Prevention Program ("PPA") with ASEA, outlining the possible risks and accidents that may occur during the operation phase of the project, and the adequate measures to tackle or minimize such risks.

Industrial, Operational, and Environmental Safety Management System

As set forth in Articles 12-19 of the law that created the ASEA (*Ley de la Agencia Nacional de Seguridad Industrial y de Protección al Medio Ambiente del Sector Hidrocarburos*), hydrocarbon projects (such as a natural gas storage and liquefaction plant and pipeline) must implement a *Sistema de Administración de Seguridad Industrial, Seguridad Operativa y Protección al Medio Ambiente* (Industrial, Operational, and Environmental Safety Management System, or "SASISOPA").

The SASISOPA is a technical tool designed to oversee a facility's industrial, operative and environmental operation during its entire life cycle, with the intention to detect risks, faults and improve its performance and overall safety.

The SASISOPA is filed with, approved and governed by ASEA which will regularly monitor this program's implementation and may request detailed reports on progress. As is the case with the EIA, noncompliance may result in hefty fines and the facility's closure.

Additionally, those who will develop a pipeline or liquefaction project must be registered under a *Clave Única de Registro del Regulado* (Unique Regulated Registry Number, or "CURR"), which is a code that allows the ASEA to identify who is requesting a specific authorization.

Waste Registrations and Management Plans

Those facilities that generate hazardous[1] and special handling[2] wastes must register before ASEA, outlining in their registry applications the type of waste and annual volumes that will be generated.

Furthermore, if at any time during the project's construction or operations phase, more than 10 tons of each strand of waste will be generated, a Waste Management Plan must be drafted and filed for approval before ASEA, as applicable. These Waste Management Plans outline the processes that generate the waste, providing the available measures for recycling, re-use or final disposition in appropriate landfills.

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[1] Those which present corrosive, reactive, explosive, flammable or toxic characteristics or that contain infectious agents. Likewise, hazardous wastes are those listed in Mexican official standard NOM-052-SEMARNAT-2005.

[2] Special handling wastes are those generated as part of productive processes that do not have the characteristics to be considered as hazardous or solid urban wastes (domestic wastes), or are generated by large generators of urban wastes.

Comprehensive Environmental License

Those facilities subject to Federal jurisdiction (such as those pertaining to the hydrocarbons sector) that generate air emissions require a *Licencia Ambiental Única* (Comprehensive Environmental License, or "LAU") from ASEA.

The LAU outlines the processes that generate the emissions, as well as the kind of gasses generated, volumes and abatement measures.

If at any point of operations, processes change or emissions cease (or increase), the LAU must be updated.

Finally, between March and June of every year, a *Cédula de Operación Anual* (Annual Operation Schedule) must be filed before ASEA, reporting the air emissions, wastewater and hazardous waste generated during the previous calendar year.

APPENDIX F

PROJECT OPERATIONAL EMISSIONS

FLNG Altamira Emissions Profile (per FLNG Unit)	
Pollutant	**Emissions (tons per year)**
NOx	9.16
CO	18.28
VOCs	2.97
PM10/PM2.5	0.49
SO2	35.76
HAP	0.12
Pb	3.3E-05
H2SO4	2.77
CO2	92,222
CH4	27.68
N2O	0.01
GHGs (as CO2e)	92,918
H2S	0.194

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

In The Matter Of:

NFE Altamira FLNG, S. de R.L. de C.V.	**)**	**FE Docket No. 22-___-LNG**

CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

Pursuant to 10 C.F.R. § 590.103(b) (2021), I, Lisa M. Tonery, hereby certify that I am a duly authorized representative of NFE Altamira FLNG, S. de R.L. de C.V. and that I am authorized to sign and file with the Department of Energy, Office of Fossil Energy and Carbon Management, on behalf of NFE Altamira FLNG, S. de R.L. de C.V. the foregoing documents and in the above captioned proceeding.

Dated at New York, N.Y., this 9th Day of September, 2022.

/s/ Lisa M. Tonery
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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT

In The Matter Of:

NFE Altamira FLNG, S. de R.L. de C.V.	**)**	**FE Docket No. 22-___-LNG**

CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

Pursuant to 10 C.F.R. § 590.103(b) (2021), I, Mariah T. Johnston, hereby certify that I am a duly authorized representative of NFE Altamira FLNG, S. de R.L. de C.V., and that I am authorized to sign and file with the Department of Energy, Office of Fossil Energy and Carbon Management, on behalf of NFE Altamira FLNG, S. de R.L. de C.V., the foregoing documents and in the above captioned proceeding.

Dated at New York, N.Y., this 9th Day of September, 2022.

/s/ Mariah T. Johnston
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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT

In The Matter Of:

NFE Altamira FLNG, S. de R.L. de C.V.	**)**	**FE Docket No. 22-___-LNG**

CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

Pursuant to 10 C.F.R. § 590.103(b) (2021), I, Jacob I. Cunningham, hereby certify that I am a duly authorized representative of NFE Altamira FLNG, S. de R.L. de C.V., and that I am authorized to sign and file with the Department of Energy, Office of Fossil Energy and Carbon Management, on behalf of NFE Altamira FLNG, S. de R.L. de C.V., the foregoing documents and in the above captioned proceeding.

Dated at Washington, D.C., this 9th Day of September, 2022.

/s/ Jacob I. Cunningham
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