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UNITED STATES OF AMERICA DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY

Eagle LNG Partners Jacksonville II LLC)

Docket No. 17-<u>79</u>-LNG

APPLICATION OF EAGLE LNG PARTNERS JACKSONVILLE II LLC FOR LONG-TERM, MULTI-CONTRACT AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS TO FREE TRADE AGREEMENT AND NON-FREE TRADE AGREEMENT NATIONS

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Eagle LNG Partners Jacksonville II LLC ("Eagle Maxville") hereby requests, pursuant to Section 3 of the Natural Gas Act of 1938, as amended ("NGA")¹ and Part 590 of the Department of Energy's regulations,² that the DOE Office of Fossil Energy ("DOE/FE") grant Eagle Maxville long-term, multi-contract authorization to export domestically produced liquefied natural gas ("LNG"), on its own behalf and as agent for others, to both free trade agreement ("FTA") and non-free trade agreement ("non-FTA") nations, in an amount of up to 7.7 MMcf/d (0.01 Bcf/d or 7,910 MMbtu/d), or approximately 2.8 Bcf/year (0.06 million tonnes per annum ("MTPA")), for a period of twenty (20) years, commencing on the earlier of the date of the first export or five years from the date of the final order granting export authorization.

This Application requests authorization to export LNG from Eagle Maxville's LNG production and storage facility currently under construction at a site in west Jacksonville, Florida (the "Maxville Facility"). The Maxville Facility is separate and distinct from the LNG production and export terminal which Eagle Maxville's affiliate, Eagle LNG Jacksonville, LLC, is developing at a site on the St. Johns River in Jacksonville.³ At the Maxville Facility, Eagle

¹ 15 U.S.C. § 717b (2012).

² 10 C.F.R. Part 590 (2017).

³ An application for authorization to export LNG from this facility (the "Eagle JAX I facility") is pending before

Maxville will receive domestically produced natural gas via a local utility, process this natural gas into LNG, temporarily store the produced LNG, and periodically load LNG into cryogenic transport trailers or ISO containers for transportation by truck to port facilities for transfer into vessels for use as marine fuel in the U.S. mainland to Puerto Rico trade and for other marine fuel requirements. LNG in excess of quantities required from time to time to satisfy marine fuel demand may be delivered to vehicle fueling facilities in the region for use in vehicular fuel applications, or may be transferred to port facilities for loading onto ocean-going container ships for domestic use or for export.

The Maxville Facility will be modest in scale, but it will address significant demands for LNG for use as marine fuel and as transportation fuel for domestic purposes and for export to markets in the Caribbean Basin and elsewhere in the region. Eagle Maxville expects that the Maxville Facility will be placed into commercial operation and will begin producing LNG in September 2017.

I. APPLICANT DESCRIPTION

The exact legal name of the applicant is Eagle LNG Partners Jacksonville II LLC. Eagle Maxville is a limited liability company organized under the laws of Delaware. It is a whollyowned subsidiary of Eagle LNG Partners LLC, which also is a Delaware limited liability company, and an affiliate of Eagle LNG Partners Jacksonville LLC, which is developing a separate LNG production and export terminal facility on the St. Johns River in the Port of Jacksonville. The current member of Eagle LNG Partners LLC is Ferus Natural Gas Fuels, L.P., which is a Delaware partnership; its headquarters is located at 20445 Highway 249, Suite 250,

DOE/FE in Docket No. 16-15-LNG.

Houston, TX 77070. Eagle Maxville's headquarters is located at the same address; its telephone number is 1-832-709-0750.

II. PROJECT DESCRIPTION

Eagle Maxville has been developing the Maxville Facility since mid-2015, and commenced construction of the facility in May 2016. As of the date of this Application, Eagle Maxville has received all state and local permits required for construction and operation of the Maxville Facility (other than a routine occupancy permit that will be issued in due course), and all major construction has been completed. Minor site cleanup work is ongoing. Most components of the Maxville Facility are mechanically complete; all systems will be mechanically complete by August 1, 2017. Pre-commissioning activities involving completed systems commenced in early June. Eagle Maxville expects to complete its natural gas supply interconnect and be capable of receiving natural gas into the Maxville Facility in August 2017.

The Maxville Facility's principal purpose is to supply LNG to Crowley Puerto Rico Services, Inc. ("Crowley") for use in new LNG-powered "Commitment Class" ships that are being introduced into the U.S. mainland to Puerto Rico trade. Crowley's contractual undertaking to purchase from Eagle Maxville the LNG it requires for its Commitment Class ships has provided the financial basis upon which Eagle Maxville has been able to proceed with construction of the Maxville Facility.

The Maxville Facility will have LNG production capacity that will exceed Crowley's anticipated Commitment Class marine fuel needs. Eagle Maxville expects to market LNG produced in the Maxville Facility in excess of Crowley's requirements to other marine fuel consumers, to other domestic LNG consumers in the Southeast and beyond and, to the extent these domestic markets do not take all of the Maxville Facility's output, to export markets in the

Caribbean Basin. LNG exported from the Maxville Facility will serve industrial customers in the Caribbean Basin that have volume requirements much smaller than what is typically economical for marine bulk LNG export facilities.

At full build-out, the Maxville Facility will include two LNG trains: the first train will have the capacity to produce approximately 7.7 MMcf/d of liquefied natural gas (0.01 Bcf/d or 7,910 MMbtu/d), and the second train will have the capacity to produce 10.6 MMcf/d of liquefied natural gas (0.01 Bcf/d or 10,910 MMbtu/d), or a total of 18.4 MMcf/d (0.02 Bcf/d or 18,820 MMbtu/d) from the two trains. This is equivalent to approximately 6.7 Bcf/year (or 0.14 MTPA). The Maxville Facility includes one LNG storage tank with a capacity of 1 million gallons and a truck load-out facility for the loading of cryogenic transport trailers and ISO containers. Eagle Maxville's contractual commitment to supply Crowley's Commitment Class requirements will account for most of the capacity of the first Maxville Facility train, and will constitute a significant share of the total capacity of the Maxville Facility once the second, larger train is completed and commissioned. Eagle Maxville is here seeking authorization to export no more than the quantity of LNG that can be produced from the Maxville Facility's first train.

The Maxville Facility is located in southwestern Duval County, at the southwestern edge of Jacksonville, Florida. It occupies a small footprint (approximately 10 acres) within a parcel of approximately 97 acres that is wholly owned by Eagle Maxville. This parcel is zoned appropriately for its intended use. A drawing depicting the location of the Maxville Facility and the facility's general layout is attached as **Attachment 1**. Photographs of the Maxville Facility, as well as a video documenting its construction, are available at http://eaglelng.com.

The Maxville Facility will receive natural gas through an existing adjacent natural gas pipeline system. LNG produced from this natural gas will be loaded into cryogenic transport trailers and ISO containers and transported to the Crowley Talleyrand marine terminal in the Port of Jacksonville for delivery to Crowley,⁴ to other marine facilities for delivery to other marine fuel consumers, and to vehicle fueling stations for transfer into individual vehicles. Each cryogenic transport trailer will be capable of transporting approximately 10,000 gallons, or 0.81 MMcf, of LNG; each ISO container will hold approximately 10,000 gallons, or 0.81 MMcf, of LNG. Eagle LNG anticipates that, at full build out, the Maxville Facility will fill up to 23 ISO containers or cryogenic transport trailers per day, for a total of up to approximately 8,400 ISO containers or trailers per year.

Some ISO containers filled at the Maxville Facility will be designated for delivery to LNG customers located outside the United States. These containers will be transported by truck to the Port of Jacksonville or to facilities in other ports in Florida and neighboring states capable, without modification, of handling ISO containers. At these ports the LNG containers will be loaded onto container ships or roll-on/roll-off ocean-going carriers for export. The likely destination of these LNG exports will be nations in the Caribbean and Central America, but Eagle LNG is requesting that its export authorizations not be limited to these nations.

As an onshore facility remote from a navigable waterway that will be used to liquefy, store and load natural gas without a direct connection to a marine facility, the Maxville Facility will not be a "LNG terminal" within the meaning of Section 2(11) of the NGA.⁵ It is, therefore, not subject to the siting and construction approval jurisdiction of the Federal Energy Regulatory Commission ("FERC") under Section 3 of that Act.⁶ The Maxville Facility is, however, subject

⁴ Eagle Maxville will own and operate a satellite LNG storage and bunkering facility at the Crowley Talleyrand terminal. This tank's purpose will be to ensure that adequate quantities of LNG are available at all times for transfer into Crowley Commitment Class ships at optimal refueling flow rates.

⁵ 15 U.S.C. § 717a(11)(2012).

⁶ *Id.* § 717b(e). *See Pivotal LNG, Inc.*, 151 FERC ¶ 61,006 at P 12 (2015) ("*Pivotal*") (inland LNG facilities that would deliver LNG into trucks or containers, but would not be capable of transferring LNG directly onto ocean-

to environmental, land use and public safety-related review and approval by the City of Jacksonville, the Florida Department of Environmental Protection, the Florida Department of Transportation, the Florida State Historic Preservation Office, and the U.S. Army Corps of Engineers. The LNG facility design reflects input by the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration ("PHMSA") concerning compliance with the requirements of 49 C.F.R. Part 193; Eagle Maxville has been regularly consulting with PHMSA representatives on the Maxville Facility's design and layout.

The Maxville Facility has received all of the permits it requires to commence construction activities, and its construction commenced in early May 2016. All site clearing, preparation and improvement work was completed by the fall of 2016; as of early June 2017 all major common facilities construction and related fabrication work was complete. All systems within the Maxville Facility's Train 1 will be mechanically complete by August 1, 2017, and the Maxville Facility will be "gas ready" in August 2017. The Maxville Facility and its Train 1 will be placed into commercial service in September 2017. The status of the various environmental, land use and safety-related permits required by the Maxville Facility, as well as the current status of construction, are summarized in **Attachment 2**.

The primary market to be supplied through the Maxville Facility is the marine fuel market, and much of its output is currently committed to supply LNG-powered ships that will serve the U.S. mainland-Puerto Rico trade. The Maxville Facility is, therefore, not dependent for its viability on LNG exports, and it will be completed regardless of whether Eagle Maxville

going LNG carriers, are not "LNG terminals" subject to FERC's Natural Gas Act Section 3 jurisdiction even where LNG they produce is exported); *see also Emera CNG, LLC,* 148 FERC ¶ 61,219 at P 13 (2014) ("*Emera CNG*") (because a proposed natural gas compression and loading facility that would support compressed natural gas ("CNG") exports "will not include a pipeline to deliver gas to an international border or be capable of transferring CNG directly into an ocean-going carrier for export," the facility is not an export facility subject to FERC's siting jurisdiction under Section 3 of the Natural Gas Act).

receives authorization to export any of the Maxville Facility's LNG output. Moreover, the quantity of LNG which Eagle Maxville seeks authorization to export does not exceed the capacity of the Maxville Facility's Train 1, and accordingly the potential expansion of the Maxville Facility through the construction of Train 2 cannot be said to be driven by Eagle Maxville's request for export authorization. Significantly, any LNG produced by the Maxville Facility which is exported will pass through port facilities that will not require modification in order to handle the LNG ISO containers destined for export markets. Thus, DOE/FE's action on this application will not in any way affect the construction and operation of the Maxville Facility. For these reasons, under its regulations and precedents DOE/FE need not conduct an environmental review of the Maxville Facility.⁷ This point is discussed at greater length in **Part VI** below.

III. AUTHORIZATION REQUEST

Eagle Maxville seeks authorization to export natural gas in the form of LNG for a twenty (20) year period, on its own behalf and as agent for others, in an amount of up to 7.7 MMcf/d (0.01 Bcf/d or 7,910 MMbtu/d), or approximately 2.8 Bcf/year (0.06 MTPA), to (1) any country with which the United States current has, or in the future may enter into, a free trade agreement requiring national treatment for trade in natural gas; and (2) any country with which the United States does not have a free trade agreement requiring national treatment for trade is not prohibited by United States law or policy. Eagle Maxville requests that this authorization commence on the earlier of the date of the first export or five years from the date of the final order granting export authorization.

⁷ See, e.g., American LNG Mktg. LLC, DOE/FE Order No. 3690 at 125 (Aug. 7, 2015) (citing U.S. Dep't of Energy, Categorical Exclusion Determination, American LNG Marketing LLC, FE Docket No. 14-209-LNG (July 30, 2015)); Carib Energy (USA) LLC, DOE/FE Order No. 3487 (Sept. 10, 2014).

Eagle Maxville expects that the Maxville Facility will be placed into commercial operation and will begin producing LNG in September 2017. It anticipates that its first export could occur in the fourth quarter of 2017.

Eagle Maxville requests authorization to export LNG on its own behalf and as an agent for others. To ensure that all LNG exports through the Maxville Facility are permitted and lawful under U.S. law and policies, Eagle Maxville will comply with all DOE requirements for an exporter or agent. Eagle Maxville will register with DOE/FE each LNG titleholder for whom Eagle Maxville seeks to export LNG, consistent with DOE/FE Order No. 2913.⁸ It will set forth the terms and conditions relevant to use of Eagle Maxville's export authorization in agreements with its customers, and Eagle Maxville will provide DOE/FE with a written statement by the titleholder acknowledging and agreeing (i) to comply with the requirements of Eagle Maxville's long-term export authorization and (ii) to include those requirements in any subsequent purchase or sale agreement entered into by the titleholder.⁹ Eagle Maxville anticipates that these agreements will be for terms of up to twenty (20) years, running concurrently with Eagle Maxville's export authorization.

Eagle Maxville has not yet finalized and executed any long-term gas supply or long-term export contracts in connection with the LNG export authorization requested here, in part because long-term export authorization is necessary in order for Eagle Maxville to finalize such agreements. Eagle Maxville is engaged in commercial discussions with various interested counterparties, with potential export destinations in both FTA and non-FTA countries. It anticipates entering into commercial agreements in the form of LNG Sales and Purchase

⁸ Freeport LNG Expansion, L.P., DOE/FE Order No. 2913 (Feb. 10, 2011).

⁹ See id.; see also Southern LNG Co., LLC., DOE/FE Order No. 3106 (June 15, 2012); Excelerate Liquefaction Solutions I, LLC, DOE/FE Order No. 3128 (Aug. 9, 2012).

Agreements, under which Eagle will procure the natural gas to be processed through the Maxville Facility, hold title to the natural gas, and transfer title to the produced LNG to customers upon loading of the LNG-filled ISO containers onto container ships for export. Customers will receive LNG in exchange for a liquefaction fee, in addition to their payment of applicable natural gas pipeline transportation charges and charges for natural gas indexed to an appropriate North American pricing point.

Eagle Maxville will file any long-term gas supply or long-term export contracts under seal with DOE/FE once they are executed, as required by DOE regulations. In DOE/FE's recent orders granting long-term authorization to export LNG to non-FTA countries, DOE/FE has found that applicants need not submit all transaction-specific information with the initial application to satisfy Section 590.202(b) of the DOE regulations, particularly if such information is not available because contracts have not yet been executed.¹⁰ Instead, DOE/FE has permitted applicants to submit such information when contracts are executed, finding that this conforms with the regulatory requirement that such information be submitted "when practicable."¹¹ Eagle Maxville asks DOE/FE to treat this Application in a comparable manner.

IV. EXPORT SOURCES

Natural gas will be delivered to the Maxville Facility through natural gas pipeline facilities located adjacent to the Maxville Facility site. Natural gas liquefied at the Facility will be stored onsite in a 1,000,000 gallon LNG tank and then loaded into cryogenic transport trailers and ISO containers.

¹⁰ See 10 C.F.R. § 590.202(b).

¹¹ See, e.g., Golden Pass Prods. LLC, DOE/FE Order No. 3978 (Apr. 25, 2017); Jordan Cove Energy Project, L.P., DOE/FE Order No. 3413 (Mar. 24, 2014); Cameron LNG, LLC, DOE/FE Order No. 3391 (Feb. 11, 2014); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2833 (Sept. 7, 2010).

Two interstate natural gas pipelines currently deliver natural gas to the Jacksonville area. These pipelines are owned by Florida Gas Transmission Company, LLC ("FGT") and Southern Natural Gas Company, LLC ("SNG"); the two pipelines are interconnected at various locations. They traverse the Gulf Coast producing states of Texas, Louisiana, Mississippi, and Alabama. These pipeline systems are shown on Figure 1.

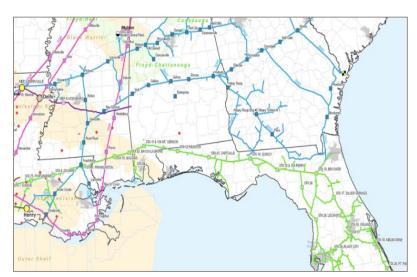


Figure 1 Major Natural Gas Pipelines Serving Jacksonville, Florida

The natural gas to be received at the Maxville Facility will be produced from natural gas supply sources that feed into the SNG pipeline system, a portion of which occupies a right-ofway adjacent to the Maxville Facility project site. Through the SNG system, Eagle Maxville will have direct access to major sources of natural gas supply, including supplies produced in the Gulf Coast region, both onshore and offshore. Pipelines interconnecting with the SNG and FGT systems will afford Eagle Maxville indirect access to additional sources of gas supply, including sources located in the mid-continent region and in the Appalachian region, such as the prolific Marcellus and Utica shales. Thus, Eagle Maxville will have the ability to draw from some of the

Source: Kinder Morgan, *at:* <u>http://www.kindermorgan.com/content/docs/KM_Natural_Gas_System_Map.pdf</u> (last accessed June 12, 2017).

most productive sources of natural gas supplies available in North America. Those sources will be more than adequate to support Maxville Facility exports for the term of the authorization Eagle Maxville requests.

V. PUBLIC INTEREST ANALYSIS

The export authorizations Eagle Maxville requests will not be inconsistent with the public interest. They accordingly should be granted under the individual provisions of the NGA which apply to exporting natural gas to FTA and non-FTA countries, respectively.

a. <u>FTA Nations – Standard of Review</u>

Section 3(c) of the NGA, as it was amended by Section 201 of the Energy Policy Act of

1992 (Pub. L. 102- 486), provides that:

[T]he exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay.¹²

Under this statutory provision, the portion of Eagle Maxville's Application seeking authorization to export LNG to nations with which the United States currently has, or in the future may enter into, an FTA requiring national treatment for trade in natural gas, is deemed to be consistent with the public interest. Accordingly, Eagle Maxville requests that DOE/FE grant this aspect of the Application without modification or delay, as it routinely does for other projects seeking authorization for export to FTA nations, consistent with the statute.¹³

¹² 15 U.S.C. § 717b(c).

¹³ See, e.g., Golden Pass Prods. LLC, DOE/FE Order No. 3978; Cameron LNG, LLC, DOE/FE Order No. 3680 (July 10, 2015); American LNG Mktg. LLC, DOE/FE Order No. 3656 (May 29, 2015); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2833; Freeport LNG Expansion, L.P., DOE/FE Order No. 2913; Magnolia LNG, LLC, DOE/FE Order No. 3245 (Feb. 26, 2013).

b. <u>Non-FTA Nations – Standard of Review</u>

Section 3(a) of the NGA sets forth the general standard for review of export applications:

[N]o person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the [Secretary of Energy] authorizing it to do so. The [Secretary] shall issue such order upon application, unless, after opportunity for hearing, [the Secretary] finds that the proposed exportation or importation will not be consistent with the public interest. The [Secretary] may by [the Secretary's] order grant such application, in whole or in part, with such modification and upon such terms and conditions as the [Secretary] may find necessary or appropriate.¹⁴

DOE/FE consistently has found that Section 3(a) of the NGA creates a rebuttable presumption that proposed exports of natural gas are in the public interest, and DOE must grant such an application unless those who oppose the application overcome that presumption.¹⁵ To overcome this presumption, an opponent must affirmatively demonstrate that the proposal is inconsistent with the public interest.¹⁶ DOE/FE reviews the evidence developed in the record of each application proceeding to make its determination.¹⁷

While NGA section 3(a) establishes a broad public interest standard and a presumption favoring export authorizations, it does not define "public interest" or identify the criteria that must be considered. DOE/FE has explained that in evaluating the extent to which an export application is consistent with the public interest, it focuses on (i) the domestic need for the

¹⁴ 15 U.S.C. § 717b(a) (emphasis added). This authority has been delegated to the Assistant Secretary for Fossil Energy, pursuant to Redelegation Order No. 00-002.04D (Nov. 6, 2007).

¹⁵ See, e.g., Freeport LNG Expansion, L.P. & FLNG Liquefaction, LLC, DOE/FE Order No. 3282 at 5-6 (May 17, 2013); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961 at 28 (May 20, 2011); Cameron LNG, LLC, DOE/FE Order No. 3391 (Feb. 11, 2014).

¹⁶ See Freeport LNG, DOE/FE Order No. 3282 at 6; see also Phillips Alaska Natural Gas Corp. & Marathon Oil Co., DOE/FE Order No. 1473 at 13, n. 42 (Apr. 2, 1999) ("Section 3 creates a statutory presumption in favor of approval of an export application and the Department must grant the requested export [application] unless it determines the presumption is overcome by evidence in the record of the proceeding that the proposed export will not be consistent with the public interest.").

¹⁷ *Freeport LNG*, Order No. 3282 at 7.

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/FE's policy of promoting market competition, and (iv) any other factors bearing on the public interest.¹⁸ It has identified several "other factors" bearing on the public interest relevant to an export authorization including, for example, whether exports are beneficial for regional economies, the extent to which exports will mitigate trade imbalances, various international impacts, security of the domestic natural gas supply, and other economic and environmental impacts.¹⁹

Consistent with its Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, DOE/FE examines whether evidence of domestic supply shortages overcomes the statutory presumption that a proposed export is not inconsistent with the public interest.²⁰ Although the Policy Guidelines deal specifically with imports, DOE/FE has held that their principles also are applicable to exports.²¹ The Policy Guidelines are intended to "minimize federal control and involvement in energy markets and to promote a balanced and mixed energy resources system."²² According to DOE/FE:

¹⁸ See, e.g., American LNG Mktg. LLC, DOE/FE Order No. 3690 at 10 (setting forth the specific factors); see also, e.g., Golden Pass Prods. LLC, DOE/FE Order No. 3978 at 11-12 (Apr. 25, 2017); Cameron LNG, LLC, DOE/FE Order No. 3391-A at 8 (Sep. 10, 2014); Freeport LNG, Order No. 3282 at 7; Lake Charles Exports, Order No. 3324 at 8; Dominion Cove Point LNG, Order No. 3331 at 8-9 (Sep. 11, 2013); Freeport LNG Expansion, LP, Order No. 3357 at 9 (Nov. 15, 2013); Jordan Cove, Order No. 3413 at 8; Oregon LNG, Order No. 3465 at 8 (Jul. 31, 2014); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961.

¹⁹ See, e.g., Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961 at 34-38 (May 20, 2011); Freeport LNG, Order No. 3282 at 6; Lake Charles Exports, Order No. 3324 at 7; Dominion Cove Point LNG, Order No. 3331 at 7; Freeport LNG, Order No. 3357 at 8; Cameron LNG, Order No. 3391-A at 8; Jordan Cove, Order No. 3413 at 6-7; Oregon LNG, Order No. 3465 at 7.

²⁰ See, e.g., Freeport LNG, Order No. 3282; Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, 49 Fed. Reg. 6684 (Feb. 22, 1984) ("Policy Guidelines").

²¹ Freeport LNG, Order No. 3282 at 7; see also Phillips Alaska Natural Gas Corp. and Marathon Oil Co., DOE/FE Order No. 1473 at 14 (Apr. 2, 1999); Sabine Pass Liquefaction, Order No. 2961 at 28.

²² *Freeport LNG*, Order No. 3282 at 6.

The market, not government, should determine the price and other contract terms of imported [or exported] gas. . . . The federal government's primary responsibility in authorizing imports [or exports] should be to evaluate the need for the gas and whether the import [or export] arrangement will provide the gas on a competitively priced basis for the duration of the contract while minimizing regulatory impediments to a freely operating market.²³

As demonstrated below, the export of domestically produced LNG as proposed in Eagle Maxville's Application is not inconsistent with the public interest and should be allowed to proceed.

c. <u>Domestic Need for Natural Gas to be Exported</u>

Eagle Maxville is seeking to export small volumes of LNG, particularly as compared with the volumes proposed in other recent applications approved by DOE/FE. The total amount of LNG Eagle Maxville seeks to export – up to 2.8 Bcf/year (0.06 MTPA) – is less than one-half of one percent of the amount of LNG which Sabine Pass Liquefaction, LLC ("Sabine Pass") was conditionally authorized to export to non-FTA countries in a DOE/FE order issued on May 20, 2011,²⁴ less than one percent of the amount of LNG which Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC ("Freeport LNG") were conditionally authorized to export by order issued May 17, 2013,²⁵ and less than one-half of one percent of the quantity of LNG which Delfin LNG LLC was authorized to export by order issued June 1, 2017.²⁶ Thus the impact of granting the export authorization sought by Eagle Maxville on the domestic availability of natural gas will be orders of magnitude smaller than the impacts identified in other recent

²³ *Policy Guidelines* at 6685.

²⁴ Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961 at 42 (authorizing Sabine Pass to export domestically produced LNG up to the equivalent of 803 Bcf/year to non-FTA countries).

²⁵ *Freeport LNG*, DOE/FE Order No. 3282 (authorizing Freeport LNG to export domestically produced LNG up to the equivalent of 511 Bcf/year to non-FTA countries).

²⁶ *Delfin LNG LLC*, DOE/FE Order No. 4028 (June 1, 2017) at 171 (authorizing Delfin LNG LLC to export up to the equivalent of 657.5 Bcf/year of natural gas to both FTA and non-FTA countries).

applications which DOE/FE granted as consistent with the public interest. Indeed, Eagle Maxville's anticipated exports of a maximum of 0.01 Bcf/d are comparable to export volumes which DOE/FE has found "will have no practical impact on the domestic supply of natural gas in the United States or natural gas markets."²⁷ Given this, DOE/FE can readily conclude that Eagle Maxville's proposed exports of small volumes of LNG will not have a significant impact on domestic supply of natural gas. These exports will, however, fulfill an important need for natural gas in Caribbean and Central American markets, which lack the customer demand, waterway infrastructure, and transmission infrastructure necessary to handle large quantities of natural gas and large LNG carriers.

In determining whether there is a domestic need for gas to be exported, DOE/FE traditionally has compared the total volume of gas reserves and recoverable resources available to be produced during the proposed export period to the total gas demand anticipated for the same period.²⁸ According to data compiled by the U.S. Energy Information Administration ("EIA"), recoverable reserves of natural gas in the U.S. are plentiful, economical, and more than adequate to meet domestic demand for many years to come.²⁹ The small volumes of natural gas that Eagle Maxville seeks long-term authorization to export will not cause any significant change

²⁷ *Flint Hills Res., LP,* DOE/FE Order No. 3829 at 15-16 (May 20, 2016) (addressing proposed LNG exports of 0.01 Bcf/d); *see also Carib Energy (USA) LLC,* DOE/FE Order No. 3487 at 15 (finding that proposed LNG exports equivalent to 0.04 Bcf/d are "unlikely to have a significant impact on domestic natural gas markets or on the domestic economy generally").

See, e.g., Conoco Phillips Alaska Natural Gas Corp. & Marathon Oil Co., DOE/FE Order No. 2500 at 43 (Jun. 3, 2008); Phillips Alaska Natural Gas Corp. & Marathon Oil Co., DOE/FE Order No. 1473 at 29, 40, 46 (Apr. 2, 1999).

^{(&}quot;EIA EIA, Outlook 50 (Jan. 5. AEO Annual Energy 2017, at 2017) 2017"), http://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf ("Across most cases, natural gas production increases despite relatively low and stable natural gas prices, supporting higher levels of domestic consumption and natural gas exports"); EIA, Annual Energy Outlook 2016, at MT-24 (Aug. 2016) ("EIA AEO 2016"), http://www.eia.gov/forecasts/aeo/pdf/0383(2016).pdf ("In the Reference case, U.S. natural gas production is sufficient to meet increases in demand for both domestic consumption and net exports through 2040 The United States transitions from being a net importer of [natural gas]... to a net exporter in 2018.").

in domestic supply, demand, or prices for natural gas. But such exports will promote both domestic employment opportunities and global environmental benefits as emerging markets in Caribbean and Central American countries transition to natural gas from other fossil fuels that emit greater amounts of greenhouse gases ("GHGs"). Overall, Eagle Maxville's requested export authorization will have positive impacts on the U.S. economy and positive global environmental effects, without detrimentally impacting the market for domestic natural gas, consistent with the public interest.

i. Domestic Natural Gas Supply and Demand

Improvements in natural gas drilling and extraction technologies have increased drilling productivity domestically, leading to rapid growth in available natural gas supplies and to a transition from conventional gas supplies toward the unconventional shale gas-bearing formations in the United States.³⁰ Natural gas reserves in the United States are sufficient to meet domestic demand for decades.³¹ According to the EIA, dry natural gas proved reserves increased by 35.2 Tcf (12.9%) between 2009 and 2015 and estimates of technically recoverable natural gas resources increased by 355.7 Tcf (16.8%) between 2008 and 2014.³² Given these substantial additional resources and the relatively minor increases in domestic natural gas resources to

³² EIA, Estimated Dry Natural Gas Contained in Total Natural Gas Proved Reserves (Dec. 14, 2016), https://www.eia.gov/dnav/ng/NG ENR DRY A EPG0 R11 BCF A.htm; compare EIA, Assumptions to AEO2016, Oil and Gas Supply Module, Table 9.2 (Dec. 14, 2016), http://www.eia.gov/forecasts/aeo/assumptions/pdf/oilgas.pdf, with EIA, Assumptions to the Annual Energy Outlook 2010, Oil and Gas Supply Module – Tables, Table 9.2 (Apr. 9, 2010),

³⁰ EIA AEO 2017 at 54 ("Since 2005, technologies to more efficiently produce natural gas from shale and tight formations have driven prices down, spurring growth in consumption and net exports.").

³¹ EIA AEO 2017 at 56 (noting that "natural gas prices stay relatively flat after 2030 as technology improvements keep pace with rising demand"); EIA AEO 2016 at MT-24 – MT-25 and Table A13. This view is shared by a number of organizations engaged in energy supply, demand and pricing projections. *See generally* EIA AEO 2016 at CP-9 – CP-11 (outlooks produced by EIA, ICF, BP, ExxonMobil and EVA all project increases in U.S. natural gas production, growth in U.S. natural gas consumption and growth in U.S. natural gas exports from 2015).

http://www.eia.gov/outlooks/archive/aeo10/assumption/pdf/oil gas tbls.pdf.

accommodate both domestic demand and LNG exports, including the small volume of exports proposed in this Application, throughout the proposed export authorization period.

Domestic natural gas production has grown considerably over the past several years, led by unconventional production. In AEO 2017, EIA projects in its Reference Case that U.S. dry natural gas production will increase by 49% between 2015 and 2050, and that production from shale resources and tight oil plays will increase from 13.5 Tcf in 2015 to 27.5 Tcf in 2050.³³ EIA expects the shale gas and tight oil play share of total U.S. dry natural gas production to be nearly two-thirds by 2040.³⁴

Although domestic demand for natural gas is anticipated to grow over the next 25 years, demand will continue to be outpaced by available natural gas supply. Since 2009, production of natural gas has increased faster than demand, in large measure due to the shale gas revolution.³⁵ According to EIA's data, natural gas demand was only 17% higher in 2015 than it was in 2000.³⁶ EIA estimates that annual U.S. consumption of natural gas will grow at an annual rate of only 0.7% over the period from 2016 to 2050, with consumption expected to reach 34.62 Tcf in 2050, as compared to 27.68 Tcf in 2016.³⁷ By contrast, total U.S. dry gas production during the same time period is projected to increase by over 51.8%, with a projected annual growth rate of

³³ EIA AEO 2017 at Tables 13–14.

³⁴ EIA AEO 2017 at 58.

³⁵ The Brattle Group, *Understanding Natural Gas Markets*, at 3 (Sept. 2014), <u>http://www.api.org/~/media/files/oil-and-natural-gas/natural-gas-primer/understanding-natural-gas-markets-primerhigh.pdf</u>.

³⁶ EIA, *Natural Gas Consumption by End Use* (Jan. 31, 2017), <u>http://www.eia.gov/dnav/ng/ng cons sum dcu nus a.htm</u>.

³⁷ EIA AEO 2017 at Table 13.

1.2%.³⁸ This increase is adequate to support both the growth in U.S. gas consumption and a substantial volume of LNG exports (4.44 Tcf in 2050).³⁹

The Maxville Facility will receive and liquefy a very small amount of the abundant natural gas resource that will be available in the U.S. Of this small quantity, an even smaller quantity would be exported to foreign markets. The export of these small quantities will have no measurable impact on the availability or price of natural gas in U.S. markets.⁴⁰ There will be more than enough natural gas produced in the U.S. over the next 25 years to satisfy all domestic requirements as well as to support significant LNG exports.

ii. Impact on Domestic Prices of Natural Gas and Net Economic Impacts

U.S. shale gas production, which increased by over 50% during the 2007-2013 period, has contributed to the decline in natural gas prices from a high in 2008 of approximately \$11/MMBtu to the current wellhead price ranging from \$2.00-\$3.00/MMBtu. The annual average Henry Hub spot price for natural gas fell from \$8.86 per MMBtu in 2008 to \$2.62 per MMBtu in 2015.⁴¹ On June 12, 2017, according to *Platts Gas Daily*, the national average price for flow on June 13, 2017 was \$2.760 per MMBtu.⁴² In its AEO 2017 Reference case, EIA estimates that the Henry Hub spot price for natural gas, stated in 2016 dollars, will remain well

³⁸ *Id.*

³⁹ EIA AEO 2017 at Table 62.

⁴⁰ *Cf. Flint Hills Res.*, DOE/FE Order No. 3829 at 15-16 (finding proposed LNG exports of 0.01 Bcf/d to be unlikely to have any practical impact on price or availability of natural gas in the U.S.); *Carib Energy*, DOE/FE Order No. 3487 at 15 (finding that proposed LNG exports equivalent to 0.04 Bcf/d are "unlikely to have a significant impact on domestic natural gas markets or on the domestic economy generally").

⁴¹ EIA, *Natural Gas Spot and Futures Prices*, <u>http://www.eia.gov/dnav/ng/ng_pri_fut_s1_a.htm</u> (last accessed June 13, 2017).

⁴² S&P Global Platts Gas Daily (June 13, 2017) at p. 1.

under \$5.00 per MMBtu through 2025, and will not exceed \$5.11 in any year on average over the period from 2016-2040.⁴³

Several analyses have concluded that LNG exports in the range 6 to 12 Bcf/d would not have any significant impact on domestic prices. For example, the Peterson Institute for International Economics report, *Liquefied Natural Gas Exports: An Opportunity for America*, analyzed recent economic analyses which predicted LNG exports will raise domestic natural gas prices in the range of 3.5 to 16.0%.⁴⁴ According to ICF, LNG exports are projected to have moderate impacts on domestic U.S. natural gas prices ranging from approximately \$0.32 to \$1.02 per MMBtu, on average, between 2016 and 2035. ICF projects the 2016-2035 average Henry Hub natural gas prices to be between \$5.03 and \$5.73/MMBtu, depending on LNG export case.⁴⁵

Even assuming, however, that LNG exports were to have some modest impacts on domestic natural gas prices, analyses performed and commissioned by DOE/FE demonstrate that LNG exports from the United States will not result in any adverse economic impacts upon U.S. consumers. In 2012, DOE/FE released a two-part study evaluating the impacts of LNG exports on the U.S. economy ("LNG Export Study"). Part 1 of the LNG Export Study was conducted by the EIA for DOE/FE.⁴⁶ It evaluated potential micro-economic impacts of LNG exports on domestic energy consumption, production, and prices. On the basis of this study, the EIA

⁴³ See EIA AEO 2017 at Table 13.

⁴⁴ Gary Clyde Hufbauer (PIIE), et al., *Liquefied Natural Gas Exports: An Opportunity for America*, No. PB 13-6 (Feb. 2013), at 13 (attributing differences to differing assumptions about the price elasticity of domestic demand and the elasticity of supply and recoverable resources of domestic natural gas), <u>https://piie.com/sites/default/files/publications/pb/pb13-6.pdf</u>.

⁴⁵ ICF International, U.S. LNG Exports: Impacts on Energy Markets and the Economy (May 15, 2013) (the "ICF Study"), http://www.api.org/~/media/Files/Policy/LNG-Exports/API-LNG-Export-Report-by-ICF.pdf.

⁴⁶ EIA, Effect of Increased Natural Gas Exports on Domestic Energy Markets, as Requested by the Office of Fossil Energy (Jan. 2012), <u>https://www.eia.gov/analysis/requests/fe/pdf/fe_lng.pdf</u>.

projected that natural gas prices would rise over time, even without additional LNG exports.⁴⁷ In 2014, the EIA released an updated study, also commissioned by DOE/FE, which evaluated the effects of increased LNG exports, ranging from 12 Bcf/d to 20 Bcf/d, on the U.S. energy markets.⁴⁸ EIA's updated study found that even if LNG exports are greater than forecasted, "[i]ncreased energy production spurs investment, which more than offsets the adverse impact of somewhat higher energy prices when the export scenarios are applied."⁴⁹

Part 2 of the DOE LNG Export Study was conducted by NERA Economic Consulting ("NERA").⁵⁰ NERA assessed macroeconomic impacts of LNG exports, in particular impacts on domestic natural gas prices, under several supply and demand scenarios, including scenarios with unlimited LNG exports. In each scenario, NERA found that the U.S. would experience net economic benefits from increased LNG exports.⁵¹ NERA also projected that "price changes attributable to LNG exports remain in a relatively narrow range across the entire range of scenarios."⁵²

Even in export scenarios involving the greatest theoretical price increases projected by the EIA, NERA found net benefits to U.S. consumers:

> Across the scenarios, U.S. economic welfare consistently increases as the volume of natural gas exports increased. This includes scenarios in which there are unlimited exports. The reason for this is that even though domestic natural gas prices are pulled up by LNG exports, the value of those exports also rises so that there is a net gain for the U.S. economy measured by a broad metric of

⁴⁷ *Id.* at 6-7.

⁴⁸ EIA, Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets (Oct. 2014), https://www.eia.gov/analysis/requests/fe/pdf/lng.pdf.

⁴⁹ *Id.* at 12.

⁵⁰ NERA Economic Consulting, *Macroeconomic Impacts of LNG Exports from the United States* (Dec. 3, 2012) (the "NERA Study"), <u>https://energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf</u>.

⁵¹ *Id.* at 6.

⁵² *Id.* at 2.

economic welfare or by more common measures such as real household income or real GDP. Although there are costs to consumers of higher energy prices and lower consumption and producers incur higher costs to supply the additional natural gas for export, these costs are more than offset by increases in export revenues along with a wealth transfer from overseas received the form of payments for liquefaction services. The net result is an increase in U.S. households' real income and welfare.⁵³

NERA further found that these net economic benefits became greater with higher levels of exports, even assuming unlimited exports and the highest prices estimated by EIA.⁵⁴

NERA updated its 2012 study in 2014. Sabine Pass Liquefaction filed the updated NERA study with DOE/FE in support of its applications for various export authorizations.⁵⁵ Using more recent data, NERA analyzed scenarios in which no limits were placed on the level of U.S. LNG exports. In all scenarios studied, the updated NERA study found that (i) the U.S. would experience net economic benefits from increased LNG exports and (ii) as the volume of natural gas exports increases, U.S. economic welfare also increases consistently, with the greatest U.S. economic welfare under scenarios in which unconstrained exports occur.⁵⁶ DOE/FE repeatedly has found that the NERA Study is sound and supports the proposition that the United States will experience net economic benefits from LNG exports and the conclusion that proposed LNG exports are not inconsistent with the public interest.⁵⁷

⁵³ *Id.* at 6 (footnote omitted).

⁵⁴ *Id.* at 6, 12; *see also Cameron LNG, LLC*, DOE/FE Order No. 3391 (Feb. 11, 2014).

⁵⁵ NERA Economic Consulting, *Updated Macroeconomic Impacts of LNG Exports from the United States* (prepared for Cheniere Energy, Inc.) (Feb. 20, 2014) (the NERA Study II"), <u>http://www.nera.com/publications/archive/2014/updated-macroeconomic-impacts-of-lng-exports-from-the-united-sta.html</u>. This study was submitted to DOE/FE on February 28, 2014 by Sabine Pass Liquefaction, LLC in support of its long-term LNG export authorization application, in Docket Nos. 13-30-LNG, 13-42-LNG and 13-121-LNG.

⁵⁶ NERA Study II.

⁵⁷ See, e.g., Freeport LNG, DOE/FE Order No. 3282 at 110; Lake Charles Exports, DOE/FE Order No. 3324 at 123; Dominion Cove Point LNG, DOE/FE Order No. 3331 at 140; Freeport LNG, DOE/FE Order No. 3357 at 153; Cameron LNG, DOE/FE Order No. 3391 at 130-31; Jordan Cove, DOE/FE Order No. 3413 at 141; Oregon LNG, DOE/FE Order No. 3465 at 139; American LNG, DOE/FE Order No. 3690 at 129-32; Flint Hills Res., DOE/FE Order No. 3829 at 17.

The most recent study of the potential macroeconomic impacts of LNG exports came to similar conclusions even as to exports of quantities of LNG greater than those evaluated in earlier analyses. This study, *The Macroeconomic Impact of Increasing U.S. LNG Exports*, completed in October 2015,⁵⁸ was performed by The Center for Energy Studies at Rice University's Baker Institute and Oxford Economics, who were commissioned by Leonardo Technologies, Inc. on behalf of the Department of Energy to undertake a scenario-based assessment of the macroeconomic impact of alternative levels of U.S. LNG exports under a range of assumptions concerning U.S. resource endowment, U.S. gas demand, and the international market environment. The CES October 2015 Study considered international conditions sufficient to support 12 Bcf/d and 20 Bcf/d of U.S. LNG exports. It finds that:

The overall macroeconomic impacts of increasing U.S. LNG exports to 20 Bcf/d from 12 Bcf/d are small, reflecting the small size of the shocks relative to the economy overall In the Reference domestic scenario, the increase in net gas exports is equivalent to 0.02 percent of GDP on average over 2026–2040, and the incremental investment in the gas sector associated with the increase in exports in that span is just 0.06 percent of GDP. In aggregate, the size of the economy is little changed in the long run, with GDP 0.03 percent (\$7.7 billion USD annually in today's prices) higher on average over 2026–2040 than in the 12 Bcf/d export case.⁵⁹

It goes on to conclude that:

[T]he overall macroeconomic impacts of LNG exports are marginally positive. Across the domestic cases, the positive impacts of higher U.S. gas production, greater investment in the U.S. natural gas sector, and increased profitability of U.S. gas producers typically exceeds the negative impacts of higher

⁵⁸ The Center for Energy Studies at Rice University's Baker Institute and Oxford Economics, *The Macroeconomic Impact of Increasing U.S. LNG Exports* (Oct. 2015) (the "CES October 2015 Study"), http://energy.gov/sites/prod/files/2015/12/f27/20151113_macro_impact_of_lng_exports_0.pdf (last accessed June 12, 2017).

⁵⁹ *Id.* at 14.

domestic natural gas prices associated with increased LNG exports.⁶⁰

Several other publicly-available studies similarly find that the U.S. will benefit from

exporting domestically produced LNG. These studies include, for example:

- Charles Ebinger, et al., Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas, Brookings Institution (May 2012), <u>https://www.brookings.edu/wpcontent/uploads/2016/06/0502_lng_exports_ebinger.pdf;</u>
- Michael Levi, A Strategy for U.S. Natural Gas Exports, The Hamilton Project, Brookings Institution (June 2012), <u>https://www.brookings.edu/wp-</u> content/uploads/2016/06/06_exports_levi.pdf;
- Kenneth B. Medlock II, Ph.D., U.S. LNG Exports: Truth and Consequence, Energy Forum at the James A. Baker Institute for Public Policy, Rice University (Aug. 10, 2012), <u>http://www.bakerinstitute.org/media/files/Research/da5493d4/US_LNG_Exports_____Truth_and_Consequence_Final_Aug12-1.pdf;</u>
- Deloitte, Exporting the American Renaissance: Global Impacts of LNG Exports from the United States (2013), https://www2.deloitte.com/content/dam/Deloitte/fpc/Documents/secteurs/energie-etressources/deloitte_global-impact-exports-american-renaissance_en_janv2013.pdf; and
- ➤ The ICF Study.

The following chart illustrates the positive impacts of LNG exports on employment, GDP, and

natural gas prices over a twenty-year period, in three different export scenarios:⁶¹

⁶⁰ *Id.* at 16.

⁶¹ ICF Study at Exhibit 1-2.

	LNG Export Case (Change from Zero Exports Case)				
Impact (2016-2035 Averages)*		Middle Exports Case			
Employment Change (No.)	(up to ~4 Bcfd) 73,100-145,100	(up to ~8 Bcfd) 112,800-230,200	(up to ~16 Bcfd) 220,100-452,300		
		,,	.,		
GDP Change (2010\$ Billion)	\$15.6-\$22.8	\$25.4-\$37.2	\$50.3-\$73.6		
Henry Hub Price (2010\$/MMBtu)	\$5.03	\$5.30	\$5.73		
Henry Hub Price Change (2010\$/MMBtu)	\$0.32	\$0.59	\$1.02		

 Table 1

 Economic Impacts of LNG Exports

Source: ICF estimates. Note: * Includes direct, indirect, and induced impacts

In its most recent orders authorizing LNG exports, DOE/FE has found that EIA's projections in AEO 2017 provide independent support for the proposition that domestic supplies will be adequate both to meet domestic needs and to support additional LNG exports and other final non-FTA LNG exports it has previously authorized.⁶² The same conclusion is appropriate here, given the *de minimis* quantities of LNG Eagle Maxville proposes to export.

Eagle Maxville hereby incorporates all of the publicly available studies cited above into this Application, and asks that DOE/FE deem these studies to be included in the record in this proceeding. Eagle Maxville offers these studies as further support for the proposition that the long-term export authorization requested here is not inconsistent with the public interest.

Eagle Maxville's proposal is modest in scope: it seeks authorization to export only approximately 2.8 Bcf/year (0.06 MTPA). LNG exports in this small quantity will produce only a very minor – likely unmeasurable – impact on overall U.S. natural gas supply and pricing.⁶³ Yet, as demonstrated by the several DOE-commissioned studies and other studies referenced

⁶² Delfin LNG LLC, DOE/FE Order No. 4028 (June 1, 2017) at 138; Golden Pass Prods. LLC, DOE/FE Order No. 3818 (Apr. 25, 2017) at 144.

⁶³ *Flint Hills Res.*, DOE/FE Order No. 3829 at 15-16 (finding proposed LNG exports of 0.01 Bcf/d to be unlikely to have any practical impact on price or availability of natural gas in the U.S.); *Carib Energy*, DOE/FE Order No. 3487 at 15 (finding that proposed LNG exports equivalent to 0.04 Bcf/d are "unlikely to have a significant impact on domestic natural gas markets or on the domestic economy generally") *See also Air Flow N. Am. Corp.*, DOE/FE Order No. 3753 at 16 (Dec. 4, 2015) ("the volume of LNG authorized for export in this Order—equivalent to 0.002 Bcf/d of natural gas—will have no practical impact on natural gas prices or security of domestic supply in the United States").

above, LNG exports, regardless of the amount exported, will offer economic benefits to U.S. consumers, in terms of net gains in real household income and real GDP.⁶⁴

d. <u>Other Public Interest Factors</u>

With an estimated capital cost of nearly \$100 million to be expended over the construction period, the Maxville Facility will result (indeed, in many cases, has already resulted) in the following economic and environmental benefits, all of which are consistent with the public interest:

- > Providing economic stimulus for the State of Florida and the North Florida region, and indirectly the U.S. economy, through the creation of jobs, increased economic activity, increased tax revenue, and exports;
- > Promoting the use of abundant domestic natural gas supplies for environmentally beneficial applications, including marine bunkering and vehicle fueling; and
- > Promoting the export of LNG to markets in the Atlantic and Caribbean basins, thereby increasing economic trade and ties with foreign nations, particularly in the Caribbean (in accordance with the U.S. Caribbean Basin Initiative), while displacing diesel and other high carbon fuels in those countries.

i. Economic Benefits

At peak construction, Eagle Maxville's Maxville Facility required some 100 workers per month. During operation, anticipated to extend at least 25 years, the Maxville Facility is expected to employ, directly and indirectly, approximately 15 individuals. Therefore, the Maxville Facility has generated and will continue to generate jobs, economic activity, and increased tax revenues, both in the short term, during construction and start-up, and in the long term, over the life of the Maxville Facility. This job creation is consistent with the National Export Initiative signed by President Obama in 2010.⁶⁵

⁶⁴ See, e.g., Delfin LNG LLC, DOE/FE Order No. 4028 (June 1, 2017) at 164 (observing that the U.S. "would experience net economic benefits" in all scenarios examined in the 2014 and 2015 LNG Export Studies).

⁶⁵ 29 Exec. Order No. 13534, 75 Fed. Reg. 12,433 (Mar. 11, 2010). As the President stated, "[a] critical component of stimulating economic growth in the United States is ensuring that U.S. businesses can actively

Construction and operation of the Maxville Facility has yielded and will yield positive impacts on the regional and national economy in several ways. These include: 1) construction material purchases from regional and national vendors, 2) increased revenues generated by sales of goods and services to construction workers and others involved in Maxville Facility construction, and 3) increased sales and property taxes revenues. The construction of the Maxville Facility will produce (and has already produced) a significant increase in direct tax revenues to the local government. Furthermore, approximately 30-40% of construction labor and materials has been and will be sourced from regional vendors, providing direct and indirect economic benefits to the City of Jacksonville and the surrounding region.

In addition to these domestic economic benefits, Eagle Maxville's export authorization could help mitigate the United States' trade deficit, which was \$505 billion in 2014, reflecting \$2.3 trillion in exports and \$2.9 trillion in imports.⁶⁶ The United States imported over \$289 billion in crude oil and petroleum products in 2014, which was a significant contributing driver of the trade deficit that year. Exports from the Maxville Facility will contribute, even if only modestly, to a reduction in the nation's trade deficit. DOE/FE has recognized comparable benefits as supporting LNG export authorizations in comparable cases.⁶⁷

ii. Environmental Benefits

LNG exports to Caribbean markets, which currently rely on higher-carbon fossil fuels for power generation, will result in significant environmental benefits. According to the U.S.

participate in international markets by increasing their export of goods Improved export performance will, in turn, create good, high-paying jobs."

⁶⁶ U.S. Department of Commerce, Bureau of Economic Analysis, U.S. International Trade in Goods and Services (Dec. 2014) at: <u>http://www.bea.gov/newsreleases/international/trade/2015/pdf/trad1214.pdf</u> (last accessed June 12, 2017).

⁶⁷ See, e.g., Flint Hills Resources, DOE/FE Order No. 3829 at 17-18 (noting the Administration goal, as set forth in the National Export Initiative and related Executive Order, to "improve conditions that directly affect the private sector's ability to export" and to "enhance and coordinate Federal efforts to facilitate the creation of jobs in the United States through the promotion of exports").

Environmental Protection Agency, natural gas-fired power generation facilities produce half as much carbon dioxide (CO_2), less than a third as much nitrogen oxides (NO_x), and one percent as much sulfur oxides (SO_x), as compared to the average air emissions from coal-fired power generation facilities.⁶⁸ Increasing the amount of LNG exported to Caribbean Basin countries will provide a low-cost energy alternative and encourage these countries to switch from fuel oil and diesel to more environmentally friendly fuels. As DOE/FE has observed, "[t]he conclusions of [DOE/FE's May 2014 study on GHG emissions from exported LNG], combined with the observation that many LNG-importing nations rely heavily on fossil fuels for electric generation, suggests that exports of U.S. LNG may decrease global GHG emissions, although there is substantial uncertainty on this point In any event, the record does not support the conclusion that U.S. LNG exports will increase global GHG emissions in a material or predictable way."⁶⁹ Exporting LNG to Caribbean Basin countries, in which natural gas can displace consumption of coal, fuel oil and diesel, will reduce carbon emissions, and will facilitate stronger relationships with neighboring countries.⁷⁰

⁶⁸ See Clean Energy, Natural Gas – Electricity from Natural Gas, U.S. Envtl. Protection Agency, <u>http://www.epa.gov/cleanenergy/energy-and-you/affect/natural-gas.html</u> [<u>http://web.archive.org/web/20150915164453/http://www.epa.gov/cleanenergy/energy-and-you/affect/natural-gas.html</u>]; see also Freeport LNG, Order No. 3282.

⁶⁹ See Cameron LNG, LLC, DOE/FE Order No. 3391-A at 83 (Sept. 10, 2014) (citing DOE/FE, Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural gas from the United States (May 14, 2014), http://energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf (last accessed June 12, 2017)); see also Freeport LNG Expansion, L.P., DOE/FE Order No. 3357-B at 94 (Nov. 14, 2014).

⁷⁰ The Facility also will provide LNG for use in domestic marine bunkering and vehicular fuel applications, which will contribute to reductions in GHG emissions from those domestic sources. DOE/FE has recognized in other recent decisions that this is a substantial benefit associated with LNG exports. *E.g., Flint Hills Resources*, DOE/FE Order No. 3829 at 16 ("[P]roposed [LNG exports] will help the destination countries in Central America and the Caribbean to convert existing power generating stations from heavy fuel oil to less expensive, more environmentally friendly natural gas. This is consistent with the Administration's objectives in the Caribbean Energy Security Initiative.").

VI. ENVIRONMENTAL IMPACT

The siting, construction and operation of the Maxville Facility requires various federal, state and local permits, essentially all of which Eagle Maxville has in hand (see **Attachment 2**). Because it will be located at some significant distance from a waterway and will deliver LNG for export to waterfront loading facilities by container or cryogenic trailer, not directly into ocean-going vessels, the Maxville Facility will not be an "LNG terminal" within the meaning of Section 1(11) of the NGA.⁷¹ Since it will not be an "LNG terminal," the Maxville Facility does not require FERC siting and construction authorization under NGA Section 3.⁷²

The impacts on the environment associated with the siting, construction and operation of the Maxville Facility have been evaluated by federal, state and local agencies charged having jurisdiction over land use and zoning, tree clearing, stormwater management, impacts on wetlands and waterbodies, threatened and endangered species, vehicular traffic, safety and air emissions. These agencies have concluded that the Maxville Facility has been sited, and can be constructed and operated, in a manner that is consistent with the applicable federal, state and local laws and ordinances. On the basis of these approvals and authorizations, and given Crowley's contractual undertaking to obtain its Commitment Class LNG requirements from the Maxville Facility, Eagle Maxville commenced construction of the Maxville Facility in May 2016, and expects to fully commission Train 1 in the third quarter of 2017.

⁷¹ 15 U.S.C. § 717a(11).

⁷² *Id.* § 717b(e). *See Pivotal*, 151 FERC ¶ 61,006 at P 12 (inland LNG facilities that would deliver LNG into trucks or containers, but would not be capable of transferring LNG directly onto ocean-going LNG carriers, are not "LNG terminals" subject to FERC's Natural Gas Act Section 3 jurisdiction even where LNG they produce is exported); *see also Emera CNG*, 148 FERC ¶ 61,219 at P 13 (because a proposed natural gas compression and loading facility that would support CNG exports "will not include a pipeline to deliver gas to an international border or be capable of transferring CNG directly into an ocean-going carrier for export," the facility is not an export facility subject to FERC's siting jurisdiction under Section 3 of the Natural Gas Act).

As of June 1, 2016, Eagle Maxville had received all necessary state, local and federal permits required for construction of the Maxville Facility. The Maxville Facility's detailed design reflects the input of PHMSA representatives concerning compliance with the requirements of 49 C.F.R. Part 193. All site clearing, preparation and improvement work was completed in the fall of 2016; all major common facilities construction and related fabrication work was essentially complete by the close of the second quarter of 2017. The Maxville Facility's Train 1 will be mechanically complete by August 2017. Train 1 will be placed into commercial service by September 2017.

Eagle Maxville seeks authorization to export no more than the capacity of Train 1 of the Maxville Facility. Accordingly, DOE/FE's authorization of exports of natural gas from the Maxville Facility (or its denial of this authorization) will not change in any way the siting, design or mode of operation of the Maxville Facility. Its viability and Eagle Maxville's pursuit of its completion are in no way dependent on its receipt of the export authorization requested here.

Given this, and consistent with the approach it has taken in other cases involving analogous circumstances,⁷³ DOE/FE can conclude that the Maxville Facility qualifies for the categorical exclusion from NEPA review which, under DOE's regulations,⁷⁴ is applicable where approvals or disapprovals of authorizations to import or export natural gas under NGA Section 3

⁷³ American LNG Mktg. LLC, DOE/FE Order No. 3690 at 125 (citing U.S. Dep't of Energy, Categorical Exclusion Determination, American LNG Marketing LLC, DOE/FE Docket No. 14-209-LNG (July 30, 2015)) (reaffirming conclusion that because the construction and operations of American LNG Marketing's already under construction Hialeah Facility would not be changed as a result of any action DOE/FE might take on the company's application, American LNG's proposed exports qualified for the B5.7 categorical exclusion); *Flint Hills Resources*, DOE/FE Order No. 3829 at 19 (concluding that approval of Flint Hills Resources' proposal to export LNG from an existing LNG liquefaction facility located in Texas qualifies for the B5.7 categorical exclusion). *See also Carib Energy (USA) LLC*, DOE/FE Order No. 3487 (proposed exports of LNG to be produced at an inland liquefaction and storage facility (the Floridian Gas Storage Facility in Martin County, Florida) and then transferred to port facilities in ISO containers qualify for DOE/FE regulations' B5.7 categorical exclusion from NEPA review).

⁷⁴ 10 C.F.R. Part 1021, Subpart D, Appendix B, Item B5.7.

involve minor operational changes, but not new construction.⁷⁵ As was the case in the *Flint Hills Resources* case, approval of the export authorization sought here "fall[s] within the scope of the B5.7 categorical exclusion because the contemplated construction and operations will not be changed due to action on [the] Application."⁷⁶ Eagle Maxville has fully committed itself to completion of the LNG production capacity for which it here seeks export authorization, the construction of that capacity near completion, and DOE action on this Application will not affect the configuration of or environmental impacts associated with the capacity in any way. Moreover, DOE/FE should deem it significant, as it has in the similar *American LNG Marketing* and *Flint Hills Resources* cases, that the Maxville Facility is small and proposes to export a relatively small volume of LNG.⁷⁷ Accordingly, under the applicable NEPA requirements and its regulations, DOE/FE need undertake no independent environmental review of the Maxville Facility.

Nor does DOE/FE need to pause in this proceeding to evaluate the potential environmental impacts associated with the production of natural gas which would be converted by the Maxville Facility into LNG for export. The quantities of natural gas to be exported in the form of LNG produced in the Maxville Facility will be so small as to produce an incremental

⁷⁵ As was true of American LNG's Hialeah Facility, the Maxville Facility has been constructed for the primary purpose of producing LNG for domestic (mainly marine bunkering) purposes, and would be constructed in precisely the same place and in precisely the same configuration regardless of whether DOE/FE authorizes exports from the facility. Thus, the construction and operation of the Maxville Facility will not be altered in any environmentally significant way by affirmative DOE/FE action on Eagle Maxville's export application. *See American LNG Mktg.*, DOE/FE Order No. 3690 at 125 and 137.

⁷⁶ *Flint Hills Resources,* DOE/FE Order No. 3829 at 19 (noting that approval of Flint Hills' export proposal will not involve any additional construction).

⁷⁷ See American LNG Mktg., DOE/FE Order No. 3690 at 125 (noting that "other factors" supporting DOE/FE's determination that the B5.7 categorical exclusion applies include "the relatively small volume [*i.e.*, the equivalent of 3.02 Bcf/yr of natural gas] authorized for export under the Application"); *Flint Hills Res.*, DOE/FE Order No. 3829 at 19 (noting that "other factors" supporting the determination that DOE/FE is required to perform no further environmental review of an export proposal making use of an existing LNG production facility include "the relatively small volume authorized for export under the Application").

demand for natural gas that will be insignificant in the context of the overall demand for natural gas in the U.S. In any event, as DOE/FE has held, "environmental concerns associated with natural gas production do not establish that exports of natural gas to non-FTA nations are inconsistent with the public interest."⁷⁸ The same conclusion is appropriate here.

VII. <u>APPENDICES</u>

The following appendices are included with this application:

- Appendix A: Opinion of Counsel
- Appendix B: Verification

⁷⁸ Air Flow N. Am. Corp., DOE/FE Order No. 3753 at 22.

VIII. CONCLUSION

For the reasons set forth above, Eagle Maxville respectfully requests that DOE/FE issue an order granting Eagle Maxville authorization to export natural gas in the form of LNG for a twenty (20) year period, on its own behalf and as agent for others, up to 7.7 MMcf/d (0.01 Bcf/d or 7,910 MMbtu/d), or approximately 2.8 Bcf/year (0.06 MTPA), to (1) any country with which the United States current has, or in the future may enter into, a free trade agreement requiring national treatment for trade in natural gas; and (2) any country with which the United States does not have a free trade agreement requiring national treatment for trade in natural gas and with which trade is not prohibited by United States law or policy. Eagle Maxville requests that this order be issued as promptly as possible, so that it can begin to furnish LNG to export markets eager to use that LNG to displace costlier, more environmentally damaging fuels.

Respectfully submitted,

EAGLE LNG PARTNERS JACKSONVILLE II LLC

Janes J. Borre, J.

James F. Bowe, Jr.

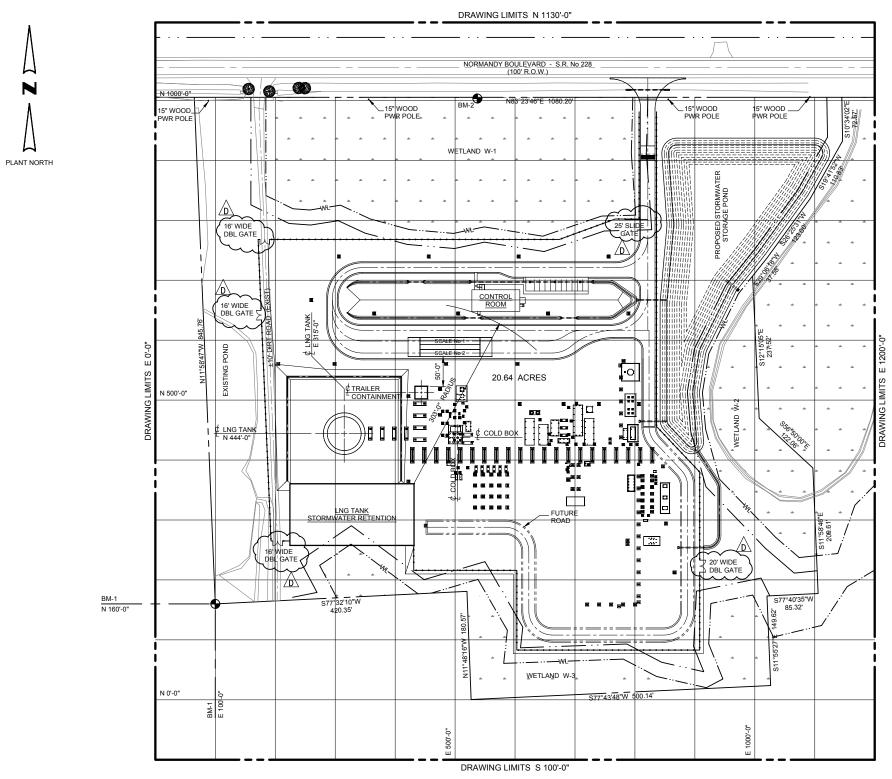
James F. Bowe, Jr. Carolyn J. Lachman King & Spalding LLP 1700 Pennsylvania Ave., NW, Suite 200 Washington, DC 20006-4707

Counsel for Eagle LNG Partners Jacksonville II LLC

Dated: June 15, 2017

Attachment 1

Location and Layout of the Maxville Facility



REFERENCE DRAWINGS REVISIONS TITLE NO. FIRM DATE DESCRIPTION NO. A F-518 5/09/16 ISSUED FOR INFORMATION B F-518 5/25/16 REVISED COORDINATE C F-518 6/14/16 ADD LNG SW RETENTION & D F-518 9/23/16 ADDED GATE CALL-OUTS ENGINEERING RECORD SAULSBURY INDUSTRIES ENGINEERING SERVICES TEXAS REGISTERED ENGINEERING FIRM F-518 PROJ. MANAGER: SR SI JOB NU J PROJ. ENGR: BC AFE NUME PROJ. DESIGN: KC WELD COD SAULSBURY

\\srvlap\Jobs\Eagle LNG\10009 Eagle LNG JAX II\03 ENGINEERING, DESIGN\3.2 Civil\3.2.1 Civil Drawings\D-10009-C03-100 (9/23/2016 11:42:26 AM)

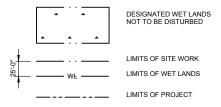
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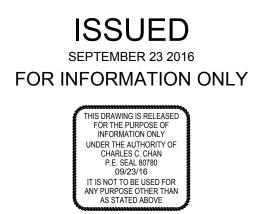
NOTES:

NOTES:

- 1. REFER TO DRAWING D-10009-C01-100 FOR DRAWING INDEX.
- 2. REFER TO DRAWING D-10009-C02-100 FOR CIVIL GENERAL NOTES.
- 3. DRAWING BASED ON SURVEY PROVIDED BY SOUTHEASTERN SURVEYING AND MAPPING CORPORATION, JACKSONVILLE FLORIDA (CERT LB2108).
- 4. HORIZONTAL AND VERTICAL CONTROLS ARE BASED ON THE FOLLOWING:
- PLANT BENCHMARK BM-1: PLANT N 160'-0" = LATITUDE: N 30.2039 PLANT E 100'-0" = LONGITUDE: W 81.9766
- PLANT BENCHMARK BM-2: FLORIDA DOT BM #3 ELEV = 89.32 (NAVD_88)

LEGEND:







		ΒY	CHK.	APP.		EAGLE		
		JBR	KC			LNG PARTNERS		
		JBR	KC					
CNTRL F	RM	JBR	кс		EAGLE LNG – JAX II CIVIL PLOT PLAN			
		LA	JR					
JMBER:	10	009				DUVAL CO, FLORIDA		
BER:					PLOT SCALE: 1"=80'	DWG. NO.	REV	
E:					FILE NAME:	D-10009-C03-100	D	

Attachment 2

Eagle Maxville Permitting Matrix

Eagle LNG Maxville Project - Permit Matrix As of June 14, 2017

Agency	Permit	Permit Number	Date Submitted	Date Issued	Comments
City of Jacksonville					
	Tree Permit	N/A	N/A	N/A	no protected trees present
	Development Number	9242.000	April 22, 2016	May 5, 2016	
	Address	N/A	N/A	May 27, 2016	16236 Normandy Boulevard
	Mobility	91269.0	April 22, 2016	May 11, 2016	
	Concurrency Reservation	91269.2	April 22, 2016	May 11, 2016	
	Certificate				
	Early Clearing Permit	L-16-776675.000	May 10, 2016	May 12, 2016	
	Landscape approval - Field	9242.000	May 19, 2016	May 26, 2016	
	Landscape approval - Office	9242.000	May 11, 2016	February 10, 2017	
	10-set approval	9242.000	May 11, 2016	February 10, 2017	
	Miscellaneous Inspections	TBD	TBD	TBD	
	Water well	NA - Connecting City Wa	iter		
	Septic	TBD	TBD	TBD	Private
	Fire Protection NFPA 1	9242.000	May 19, 2016	February 10, 2017	
	Fire Protection NFPA59A	TBD	TBD	TBD	
JEA					
	Water Main Extension			June 1, 2017	
St Johns River Water Manageme	nt District				•
	Borrow Pit Permit	147750-1	June 28, 2016	December 22, 2016	Must notify 48 hours prior to construction
					Valid for 5 years
Florida Department of Environm					
	Air Permit	N/A	N/A	N/A	Exempt from permitting except genset email from FDEP 5/20/16
	General Air Permit	0310613	May 24 <i>,</i> 2016	June 24, 2016	Approval within 30 days of submittal
	Environmental Resource Permit	16-0342119-001-EI	March 2, 2016	May 13, 2016	FDEP granted clearing of site 5/5/16 via email exception
			May 18, 2016	May 18, 2016	Submit at construction conclusion
	NPDES NOI	FLR10QF12-001	June 8, 2016	June 11, 2016	
	NPDES NOT	TBD	On Completion	On Completion	To be submitted at contruction conclusion
Florida Department of Transport	ation		·	·	
· · ·	Safety Upgrade	16A2940036	April 15, 2016	May 2, 2016	For western driveway
	, , , , ,				Saulsbury and Cardno met Richard Harvey
					FDOT and approved to begin
	Drainage Permit	16A2940038	July 28, 2016	August 31, 2016	Driveway complete
	Permanent Connection Permit	1612940061	July 28, 2016	August 31, 2016	Driveway complete
State Historic Preservation Office	2				
	Clearance	2016-152	January 14, 2016	February 29, 2016	No historic or cultural impacts
U.S. Army Corps of Engineers			,,	,,,	
,,	Wetlands Permit	SAJ-2016-00780 (NWP-	March 16, 2016	March 24, 2016	Construction can extended one year beyond
	NWP 39 Verification	BJC)			expiration
					Self Certification Statement due 60 days
					after completeion of work
U.S. Fish & Wildlife Service	•				
	N/A	N/A	N/A	N/A	No listed species present
Florida Fish and Wildlife Conserv	•		,	,	
	N/A	N/A	N/a	N/A	No listed species present
	14/ CL	רעיין	iv/a	N/ A	no insteu species present

Appendix A

Legal Opinion of Counsel for Eagle LNG

KING & SPALDING

King & Spalding LLP 1700 Pennsylvania Avenue, N.W. Washington, D.C. 20006-4706 Tel: +1 202 737-0500 Fax: +1 202 626-3737 www.kslaw.com

James F. Bowe, Jr. Partner Direct Dial: +1 202 626-9601 Direct Fax: +1 202 626-3737 jbowe@kslaw.com

June 15, 2017

Mr. John Anderson Office of Fossil Energy (FE-34) U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

Re: *Eagle LNG Partners Jacksonville II LLC*, Docket No. 17-___-LNG Application for Long-Term Authorization to Export Liquefied Natural Gas to Both FTA and Non-FTA Countries

Dear Mr. Anderson:

This opinion is provided pursuant to Section 590.202(c) of the Department of Energy Regulations, 10 C.F.R. § 590.202(c), in support of the Application of Eagle LNG Partners Jacksonville II LLC ("Eagle Maxville") for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas to Free Trade Agreement and Non-Free Trade Agreement Nations.

I am counsel to Eagle Maxville, a limited liability company organized under the laws of the State of Delaware. I have reviewed and relied upon the corporate documents of Eagle Maxville, and it is my opinion that the proposed exports described in the Application are within the limited liability company powers of Eagle Maxville.

Very truly yours,

Janes J. Borre. J.

James F. Bowe, Jr. Counsel to Eagle LNG Partners Jacksonville II LLC

Appendix B Verification

VERIFICATION

I, James F. Bowe, Jr., being first duly sworn, state that I am a duly authorized representative of Eagle LNG Partners Jacksonville II LLC; I have read the above Application and I am familiar with its contents; and the matters set forth in the Application are true and correct to the best of my knowledge, information, and belief.

James F. Bowe, Jr.

Counsel to Eagle LNG Partners Jacksonville II LLC

Sworn and subscribed before me this $\frac{1512}{100}$ day of June, 2017.

Enes Notary Public for the District of Columbia

My Commission expires: 10/31/2019

