RECEIVED
By Docket Room at 9:13 am, Jan 10, 2013

January 9, 2013

VIA ELECTRONIC DELIVERY

Mr. John A. Anderson
Office of Fossil Energy
U.S. Department of Energy
Docket Room 3F-056, FE-50
Forrestal Building
1000 Independence Avenue, S.W.
Washington, DC 20585

RE: Trunkline LNG Export, LLC, Docket No. 13-04 - LNG
Application for Long-Term Authorization to Export Liquefied Natural Gas

Dear Mr. Anderson:

Trunkline LNG Export, LLC ("TLNG Export") is developing a project to export liquefied natural gas ("LNG") from the United States. The LNG will be produced at the existing LNG import terminal owned and operated by Trunkline LNG Company, LLC ("TLNG") and located at Lake Charles, Louisiana. TLNG Export will modify the terminal to include natural gas liquefaction capability. Export operations will utilize the existing LNG storage and marine berthing facilities located at the TLNG facility. The modifications to the TLNG facility will be the subject of an application by TLNG Export, together with its affiliates TLNG and Trunkline Gas Company, LLC, to the Federal Energy Regulatory Commission ("FERC") for authorization under Section 3 of the Natural Gas Act. On March 30, 2012, TLNG Export submitted a Request to Initiate FERC Pre-Filing Review Process in FERC Docket No. PF12-8-000. On April 6, 2012, FERC issued a letter approving the request to initiate the pre-filing process.

In the enclosed application, TLNG Export seeks long-term multi-contract authorization under Section 3 of the Natural Gas Act to export 15 million metric tons of LNG per annum for a term of 25 years beginning on the earlier of the date of first export from the Lake Charles facility or ten years from the date the requested authorization is granted. The amount of LNG sought to be exported from the Lake Charles terminal is the same amount for which export authorization is being sought by Lake Charles Exports, LLC in its application filed May 6, 2011 and amended May 26, 2011 in DOE/FE Docket No. 11-59-LNG. TLNG Export's application is non-additive - TLNG Export is not seeking to export any additional volumes of LNG from the TLNG facility. Through the enclosed application, TLNG Export is seeking to expand the potential customers it does business with, but is not seeking to export any additional volumes of LNG from the Lake Charles facility.

TLNG Export is seeking authority to export LNG from TLNG's Lake Charles terminal to (1) any country with which the United States currently 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 with which trade is not prohibited by United States law or policy.

Subject to the receipt of appropriate FERC authorization, and construction of the liquefaction facilities, TLNG Export will provide gas liquefaction services through liquefaction agreements under which individual customers who hold title to natural gas will have the right to deliver that gas to TLNG Export and receive LNG. TLNG Export seeks to export this LNG on its own behalf and also as agent for third parties.

TLNG Export is transmitting a check in the amount of $50.00 in payment of the applicable filing fee pursuant to 10 C.F.R. § 590.207. Please contact the undersigned at (713) 989-7695 if you have any questions regarding this filing.

Respectfully submitted,

Marshall S. ("Mackie") McCrea III
President and Chief Operating Officer
Trunkline LNG Export, LLC

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

	)	
Trunkline LNG Export, LLC	)	Docket No. 13 -04 - LNG
	)	

APPLICATION OF TRUNKLINE LNG EXPORT, LLC FOR LONG-TERM AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS

Marshall S. ("Mackie") McCrea III
President and Chief Operating Officer
Todd Carpenter
Associate General Counsel
Trunkline LNG Export, LLC
5051 Westheimer Road
Houston, TX 77056
(713) 989-7560
Mackie.McCrea@energytransfer.com
Todd.Carpenter@SUG.com

James F. Moriarty
Jennifer Brough
Locke Lord LLP
701 8th Street, NW
Suite 700
Washington, DC 20001
(202) 220-6915
jmoriarty@lockelord.com
jbrough@lockelord.com

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

	)	
Trunkline LNG Export, LLC	)	Docket No. 13 -04 - LNG
	)	

APPLICATION OF TRUNKLINE LNG EXPORT, LLC FOR LONG-TERM AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS

Pursuant to Section 3 of the Natural Gas Act ("NGA"), 15 U.S.C. § 717b, and Part 590 of the regulations of the Department of Energy ("DOE"), 10 C.F.R. § 590, Trunkline LNG Export, LLC ("TLNG Export") submits this application ("Application") to the DOE Office of Fossil Energy ("DOE/FE") for long-term authorization to export 15 million metric tons per year of liquefied natural gas ("LNG") (approximately 730 bcf of natural gas using a conversion factor of 48.7 bcf of natural gas per million metric tons of LNG) produced from domestic sources for a 25-year period commencing on the earlier of the date of first export from the Lake Charles facility or ten years from the date the requested authorization is granted.

TLNG Export seeks authorization to export LNG from the terminal in Lake Charles, Louisiana ("Lake Charles Terminal") to (1) any country with which the United States currently has, or in the future may enter into, a free trade agreement ("FTA") requiring national treatment for trade in natural gas[1] and (2) any country with which the United States does not have a free trade agreement requiring national treatment for trade in natural gas with which trade is not prohibited by United States law or policy. In support of this Application, TLNG Export respectfully states the following:

[1] The United States currently has FTAs requiring national treatment for trade in natural gas with Australia, Bahrain, Canada, Chile, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, Republic of Korea and Singapore.

I. DESCRIPTION OF THE APPLICANT AND LNG FACILITY

The exact legal name of the applicant is Trunkline LNG Export, LLC. TLNG Export is a limited liability company formed under the laws of Delaware with its principal place of business at 5051 Westheimer Road, Houston, Texas 77056.

Trunkline LNG Company, LLC ("TLNG"), an affiliate of TLNG Export, owns and operates the Lake Charles Terminal. TLNG Export will own the proposed liquefaction facility and hold the LNG export authorization. Both TLNG and TLNG Export are indirectly, but ultimately, owned as follows: 60% Energy Transfer Equity, L.P. and 40% Energy Transfer Partners, L.P. As such, the existing Lake Charles Terminal, the proposed liquefaction facility, and the LNG export authorization requested herein would all be under the same ownership structure.

The Federal Energy Regulatory Commission ("FERC") certificated the Lake Charles Terminal in 1977, with the original construction completed in July 1981.[2] In 2001, BG LNG Services, LLC ("BGLS") entered into a firm services agreement with TLNG for the receipt, storage and vaporization of LNG. Consistent therewith, TLNG expanded and enhanced the terminal through the construction of additional storage capacity, additional gas-fired vaporization capacity, an additional marine berth, ambient air vaporization equipment and natural gas liquids extraction capability. Today, the Lake Charles Terminal has a firm sustained send-out capacity of 1.8 bcf/d of gas (13.7 mmtpa of LNG) and a peak send-out capacity of 2.1 bcf/d.[3] The terminal has four LNG storage tanks with a combined capacity of approximately 2.7 million barrels (425,000 cubic meters) of LNG, or approximately 9.0 bcf of gas. The terminal's natural

---

[2] *Trunkline LNG Company, et al.*, 58 FPC 726 (Opinion No. 796) *order on reh'g* 58 FPC 2935 (1977) (Opinion No. 796-A).

[3] *Trunkline LNG Company, LLC*, 117 FERC ¶ 61,339 (2006).

gas liquids processing facilities allow the extraction of ethane and other heavier hydrocarbons from the LNG stream.

II. COMMUNICATIONS

All communications and correspondence regarding this Application should be directed to the following persons:

Marshall S. ("Mackie") McCrea III
President and Chief Operating Officer
Todd Carpenter
Associate General Counsel
Trunkline LNG Export, LLC
5051 Westheimer Road
Houston, TX 77056
(713) 989-7560
Mackie.McCrea@energytransfer.com
Todd.Carpenter@SUG.com

James F. Moriarty
Jennifer Brough
Locke Lord LLP
701 8th Street, NW
Suite 700
Washington, DC 20001
(202) 220-6915
jmoriarty@lockelord.com
jbrough@lockelord.com

III. AUTHORIZATION REQUESTED

TLNG Export requests long-term authorization to export 15 million metric tons per year of domestically-produced LNG for a 25-year period commencing upon the earlier of the date of first export from the Lake Charles Terminal or the tenth anniversary of the date authorization is granted by DOE/FE.

The amount of LNG sought to be exported from the Lake Charles Terminal is the same amount for which export authorization is being sought by Lake Charles Exports, LLC ("LCE") in its application filed May 6, 2011 and amended May 26, 2011 in DOE/FE Docket No. 11-59-LNG.[4] TLNG Export's Application is non-additive - TLNG Export is not seeking to export any additional volumes of LNG from the Lake Charles Terminal. Instead, TLNG Export is simply

[4] On July 22, 2011, the DOE/FE approved that portion of the application seeking to export LNG to FTA nations. The non-FTA portion of the application is currently pending. *See Lake Charles Exports, LLC*, DOE/FE Order No. 2987 (July 22, 2011).

maximizing optionality in order to expand the potential customer base for LNG exports from the Lake Charles Terminal.

TLNG Export requests that such long-term authorization provide for export to (1) any country with which the United States currently has, or in the future may enter into, an FTA requiring national treatment for trade in natural gas; and (2) any country with which the United States does not have an FTA requiring national treatment for trade in natural gas with which trade is not prohibited by United States law or policy.

TLNG Export and TLNG are currently developing plans to modify the existing facilities at the Lake Charles Terminal to permit LNG to be loaded from the terminal's storage tanks onto vessels berthed at the existing marine facility. TLNG Export is also developing plans to install liquefaction facilities that would permit gas to be received by pipeline at the terminal and liquefied for subsequent export. On March 30, 2012, TLNG Export, TLNG, and Trunkline Gas Company, LLC ("Trunkline") submitted a Request to Initiate FERC Pre-Filing Review Process in FERC Docket No. PF12-8-000. FERC issued a letter approving the request to initiate the pre-filing process on April 6, 2012.[5]

The long-term export authorization sought in this Application, like that sought in the LCE application, is necessary in order to permit TLNG Export to proceed to incur the substantial cost of developing the liquefaction and export project. Any modifications to the Lake Charles Terminal would be subject to FERC approval.[6] Following the completion of the project, the Lake Charles Terminal will be able to receive LNG for import and export or deliver LNG for export, and its peak and sustained send-out capabilities will not be affected.

---

[5] Letter re: Approval of Pre-Filing Request, FERC Docket No. PF12-8-000 (Apr. 6, 2012).

[6] As with all the prior activities at the Lake Charles Terminal, FERC would only approve any such modifications once all NEPA requirements had been satisfied fully. *See e.g.*, *Trunkline LNG Company, LLC*, 100 FERC ¶ 61,217 (2002), *order denying reh'g and granting authorization under Section 3 of the NGA*, 101 FERC ¶ 61,300 (2002), *order denying reh'g*, 102 FERC ¶ 61,306 (2003), *order amending certificate*, 105 FERC ¶ 61,137 (2003).

In order to maximize optionality at the Lake Charles Terminal to address customer needs, TLNG Exports seeks broader authority than that sought by LCE. For its part, LCE requested authorization to export LNG on its own behalf or as agent for BGLS.[7] Here, in addition to entering into long-term natural gas supply or LNG export contracts, TLNG Export may also enter into Liquefaction Tolling Agreements ("LTA"), under which individual customers who hold title to natural gas will have the right to deliver that gas to TLNG Export and receive LNG. TLNG Export seeks to export this LNG on its own behalf and also as agent for third parties under contracts to be executed on a date that is closer to the date of first export. TLNG Export contemplates that the title holder at the point of export[8] may be TLNG Export or one of TLNG Export's customers, or another party that has purchased LNG from a customer pursuant to a long-term contract.

TLNG Export requests authorization to register each LNG title holder for whom TLNG Export seeks to export as agent, with such registration including a written statement by the title holder acknowledging and agreeing to comply with all applicable requirements included by DOE/FE in TLNG Export's export authorization, and to include those requirements in any subsequent purchase or sale agreement entered into by that title holder. In addition to the registration of any LNG title holder for whom TLNG Export seeks to export as agent, TLNG Export will file under seal with DOE/FE any relevant long-term commercial agreements between TLNG Export and such LNG title holder, including LTAs, once they have been executed. This approach will conform to DOE/FE's goal of ensuring that all authorized exports are permitted and lawful under U.S. laws and policies, including the rules, regulations, orders, policies and

[7] The DOE/FE approved that portion of the application seeking to export LNG to FTA nations. *See Lake Charles Exports, LLC*, DOE/FE Order No. 2987 (July 22, 2011).

[8] "LNG exports occur when the LNG is delivered to the flange of the LNG export vessel." *See Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC*, DOE/FE Order No. 2913 at n.4 (Feb. 10, 2011); *Dow Chemical Company*, FE Order No. 2859 at 7 (Oct. 5, 2010).

other determinations of the Office of Foreign Assets Control of the U.S. Department of the Treasury.[9]

This approach was approved by DOE/FE in *Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC* ("FLEX").[10] DOE/FE found that "FLEX has requested an acceptable process by which FLEX can act as agent for others who want to export LNG" and that "FLEX's agency rights and registration procedures are an alternative to the non-binding policy adopted by DOE/FE in DOE Opinion and Order No. 2859 . . . which set forth a non-binding policy that the title for all LNG authorized to be exported shall be held by the authorization holder at the point of export."[11] DOE/FE also accepted FLEX's proposal to file the relevant long-term commercial agreements under seal once they have been executed.[12] DOE/FE stated that by "accepting FLEX's requested registration process and contract terms, DOE/FE will ensure that the title holder is aware of all requirements in the Order, including destination restrictions, that DOE will have a record of all authorized exports, and that DOE will have direct contact information and point of contact with the title holder."[13] DOE/FE concluded that "[t]his process is responsive to current LNG markets and provides an expedited process by which companies seeking to export LNG can do so."[14] DOE/FE should approve TLNG Export's proposed procedure as it is identical to that approved for FLEX.

Although both TLNG Export and LCE are seeking authorization to export LNG from the Lake Charles Terminal, TLNG Export is separate and apart from LCE and will have no impact on LCE or its authorization. Neither TLNG Export nor its parent companies has a controlling

---

[9] *See The Dow Chemical Company*, DOE/FE Opinion and Order No. 2859 at 7-8 (Oct. 5, 2010).
[10] DOE/FE Order No. 2913 (Feb. 10, 2011).
[11] *Id*. at 7 citing *The Dow Chemical Company*, DOE/FE Opinion and Order No. 2859 at 7-8 (Oct. 5, 2010).
[12] *Id.* at 8. The practice of filing contracts after the DOE/FE has granted export authorization is well established. *See Yukon Pacific Corporation*, ERA Docket No. 87-68-LNG, Order No. 350 (Nov. 16, 1989); *Distrigas Corporation*, FE Docket No. 95-100-LNG, Order No. 1115 at 3 (Nov. 7, 1995).
[13] DOE/FE Order No. 2913 at 8.
[14] *Id.*

ownership share of LCE. TLNG Export's Application maximizes optionality for potential customers which, in turn, maximizes cost recovery on such a significant investment at the Lake Charles Terminal. TLNG Export would provide service under long-term natural gas supply contracts, LNG export contracts, or LTAs using its LNG export authorization. TLNG will allocate export quantities between LCE and TLNG Export to ensure that the total exports from the Lake Charles Terminal do not exceed the quantity authorized individually to either LCE or TLNG Export. Specifically, the total quantity of combined exports between LCE and TLNG Export will not exceed 15 million metric tons per year.

IV. EXPORT SOURCES

TLNG Export seeks authorization to export natural gas available in the United States natural gas pipeline system. While TLNG Export anticipates that sources of natural gas will include Texas and Louisiana producing regions and the offshore gulf producing regions, the natural gas to be exported may be produced throughout the United States, which is the world's most liquid natural gas market with an unparalleled transportation infrastructure.

V. PUBLIC INTEREST

TLNG Export's authorization as described herein is not inconsistent with the public interest and should be granted by DOE/FE under the individual statutory provisions that apply separately to exporting LNG to FTA and non-FTA countries.

A. FTA Countries

NGA Section 3(c), as 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.[15]

Under this statutory presumption, that portion of this Application that seeks 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, shall be deemed to be consistent with the public interest and should be granted by DOE/FE without modification or delay. Indeed, DOE/FE promptly grants authorization for export to FTA nations as a matter of statutory requirement.[16]

B. Non-FTA Countries

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.[17]

According to the DOE/FE, "[a]pplying the foregoing statutory language, DOE has consistently ruled that Section 3(a) of the NGA creates a rebuttable presumption that proposed exports of

---

[15] 15 U.S.C. § 717b(c) (2009).

[16] *See, e.g.*, *CE FLNG, LLC*, DOE/FE Order No. 3193 (Nov. 21, 2012); *Cheniere Marketing, LLC*, DOE/FE Order No. 3164 (Oct. 16, 2012); *Golden Pass Products LLC*, DOE/FE Order No. 3147 (Sept. 27, 2012); *Excelerate Liquefaction Solutions I, LLC*, DOE/FE Order No. 3128 (Aug. 9, 2012); *Southern LNG Company, L.L.C.*, DOE/FE Order No. 3106 (June 15, 2012); *SB Power Solutions Inc.*, DOE/FE Order No. 3105 (June 15, 2012); *Gulf LNG Liquefaction Company, LLC*, DOE/FE Order No. 3104 (June 15, 2012); *LNG Development Company, LLC* (D/B/A Oregon LNG), DOE/FE Order No. 3100 (May 31, 2012); *Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC*, DOE/FE Order No. 3066 (Feb. 10, 2012).

[17] 15 U.S.C. § 717b(a) (2009) (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).

natural gas are in the public interest."[18] To overcome this rebuttable presumption an opponent must affirmatively demonstrate that the proposal is inconsistent with the public interest.[19]

In evaluating the "public interest" the DOE/FE, consistent with its Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, examines whether "domestic supply shortages or domestic security needs overcome the statutory presumption that a proposed export is not inconsistent with the public interest."[20] While the Policy Guidelines deal specifically with imports, the DOE/FE has found that the principles are applicable to exports.[21] The Policy Guidelines are intended to promote free and open trade by minimizing federal government interference:

> 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.[22]

DOE/FE affirmed that "the principal focus of this agency's review of export applications in decisions under current delegated authority has continued to be the domestic need for the natural gas proposed to be exported, and any other factors to the extent they are shown to be relevant to

[18] *Sabine Pass Liquefaction, LLC*, DOE/FE Docket 10-111-LNG, Opinion and Order Denying Request for Review Under Section 3(c) of the NGA (Oct. 21, 2010) ("Sabine Section 3(c) Order"); *see also Panhandle Producers and Royalty Owners Assoc. v. ERA*, 822 F.2d 1105, 1111 (D.C. Cir. 1987) ("A presumption favoring import authorization, then, is completely consistent with, if not mandated by, the statutory directive.").

[19] Sabine Section 3(c) Order at 5; *see also Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order No. 1473 (April 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.").

[20] Sabine Section 3(c) Order at 5; Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, 49 Fed. Reg. 6,684 (Feb. 22, 1984) ("Policy Guidelines").

[21] *Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order No. 1473 at 14.

[22] Policy Guidelines at 6685.

a public interest determination."[23] As demonstrated herein, TLNG Export's Application is not inconsistent with the public interest.

(i) Domestic Need for the Natural Gas Proposed to be Exported

The main focus of the DOE/FE's public interest analysis has been the projected domestic need for the gas to be exported. Domestic need can be measured by looking at domestic natural gas supply versus natural gas demand. DOE/FE has historically compared the total volume of natural gas reserves and recoverable resources available to be produced during the proposed export period to total gas demand during the export period to determine whether there is a domestic need for the gas to be exported.[24]

It is TLNG Export's view that recoverable natural gas resources in the U.S. are abundant, cheap and sufficient to meet demand for domestic consumption and TLNG Export's proposed export over the long-term. It is also TLNG Export's belief that exports will not cause a significant increase in domestic natural gas prices. Accordingly, this proposed export authorization will not have a detrimental impact on the domestic supply of natural gas and, therefore, is not inconsistent with the public interest.

(1) Domestic natural gas supply

Recent improvements in natural gas exploration and production technology have changed the outlook for the U.S. natural gas market. Technical and efficiency improvements in horizontal drilling and hydraulic fracturing have combined to reduce the cost of producing natural gas from shale resources, making shale gas economically viable. Production from shale resources has not only offset declines in conventional natural gas production but has also led to an increase in dry gas production. The U.S. Energy Information Administration ("EIA") projects

[23] Sabine Section 3(c) Order at 6.
[24] *Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order No. 1473 at 29, 40, 46.

the share of shale production will increase to 49% by 2035.[25] In 2012, the EIA increased the amount of shale gas production in its Reference Case from 5.0 trillion cubic feet per year in 2010 (23 percent of total U.S. dry gas production) to 13.6 trillion cubic feet per year in 2035 (49 percent of total U.S. dry gas production).[26]

As shale resources have become an increasingly viable source of production, expanded exploration and drilling activity has increased producers' knowledge of known shale reserves. This has directly affected domestic resource estimates, which have generally been revised progressively higher since 2008.[27] In its 2013 Early Release Overview of its Annual Energy Outlook, the EIA stated that "[c]umulative production of dry natural gas from 2011 through 2035 in the AEO2013 Reference case is about 8 percent higher than in AEO2012, primarily reflecting continued increases in shale gas production that result from the dual application of horizontal drilling and hydraulic fracturing."[28] A 2011 Deloitte study of the economic impact of LNG exports from the United States (including the Lake Charles Terminal), noted that the proposed annual LNG exports are "fairly insignificant" compared to the amount of technically recoverable gas in the United States.[29] Under the EIA's 2013 Early Release overview:

> the United States becomes a net exporter of LNG starting in 2016, as it did in the AEO2012 Reference case, and an overall net exporter of natural gas in 2020, two years earlier than in AEO2012. U.S. exports of LNG from new liquefaction capacity are assumed to start at a level of 0.6 billion cubic feet per day in 2016 and increase to 4.5 billion cubic feet per day in 2027, as peak

[25] U.S. Energy Information Administration, Annual Energy Outlook 2012 at 3 (June 25, 2012), *available at* http://www.eia.gov/forecasts/aeo/tables_ref.cfm.
[26] *Id.*
[27] The EIA estimated in 2012 that there is currently 2,203 tcf of technically recoverable gas in the United States. *Id.* at 93.
[28] U.S. Energy Information Administration, Annual Energy Outlook 2013 Early Release Overview, Energy Production and Imports (Dec. 2012), *available at* http://www.eia.gov/forecasts/aeo/er/early_production.cfm.
[29] Deloitte Center for Energy Solutions and Deloitte MarketPoint LLC, *Made in America – The Economic Impact of LNG Exports from the United States* at 17, *available at* http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/Energy_us_er/us_er_MadeinAmerica_LNGPaper_122011.pdf ("Deloitte Study").

> export volumes are shipped out of facilities in the Gulf Coast and Alaska. . . . U.S. cumulative net LNG exports from 2011 through 2035 are up by 69 percent in AEO2013 compared with AEO2012, due in part to increased use of LNG in markets outside North America, strong domestic production, and low U.S. natural gas prices relative to other global markets.

TLNG Export expects assessments of the U.S. recoverable natural gas resource base to continue to be revised higher as producers will expand their exploration and production efforts beyond today's high profile shale plays, thereby increasing knowledge of plays considered to be on the frontier today. Moreover, uncertainty regarding the total volume of U.S. recoverable resources will decrease over time as technically recoverable resources are delineated and become proved reserves.

(2) Domestic natural gas demand

Domestic natural gas demand is the second component in the DOE/FE's analysis. The export of domestic LNG, as proposed by TLNG Export, should be considered to be in the public interest as U.S. natural gas available for supply far exceeds demand. EIA estimates that domestic natural gas demand will grow from 23.78 tcf per year in 2010 to 29.54 tcf per year in 2040.[30] EIA further estimates that cumulative domestic gas consumption from 2013 through 2040 will be 764 tcf.[31]

The export authorization requested by TLNG Export hereunder would increase demand by a maximum of 2 bcf/d (0.730 tcf per year) from 2015 through 2035.[32] Recognizing, however, that there are several applications to export domestic LNG pending before DOE and that other applicants may seek authorizations, TLNG Export has estimated not only the impact of TLNG

[30] U.S. Energy Information Administration, Annual Energy Outlook 2013 Early Release Overview, Table 13 Natural Gas Supply, Disposition, and Prices (Dec. 2012), *available at* http://www.eia.doe.gov/forecasts/aeo/tables_ref.cfm.

[31] U.S. Energy Information Administration, Annual Energy Outlook 2013 Early Release Overview, Table 13 Natural Gas Suply, Disposition, and Prices (Dec. 2012), *available at* http://www.eia.doe.gov/forecasts/aeo/tables_ref.cfm.

[32] Although TLNG Export has requested that its twenty-five year authorization commence as late as 10 years from the date of the DOE/FE's order, TLNG Export has assumed for purposes of this analysis that the most likely period of export is 2015 through 2035.

Export's proposed export but also the potential for LNG exports during the export period of 2015 through 2035.

There are presently 11 LNG terminals in operation or under construction in the U.S. with a total combined import capacity of approximately 17.5 bcf/d. Authorized expansions would increase the total capacity to approximately 21 bcf/d (see Appendix C). Although many new terminals have been proposed in recent years, the emergence of shale gas as a viable, low cost supply has meant that the U.S. no longer needs LNG imports to balance its natural gas market. As a result, additional import terminals appear unlikely to be built.

Of the 11 import terminals, the offshore facilities cannot practically be converted to export use as a technical matter. The facilities at Everett, Massachusetts and Elba Island, Georgia are market area terminals that lack access to gas supply for liquefaction. Some portion of the capacity of the remaining projects will not be converted to export as it is part of foreign LNG producers' supply chains and switching to exports would not be consistent with the sponsor aim of maintaining a chain to monetize home resources. Assuming that the remaining capacity is fully converted to exports (*i.e.*, is not operated on a bi-directional basis) the total export capacity would be 11.8 bcf/d (4.38 tcf per year).

However, it is known that some of the existing terminals are planning to develop as bi-directional facilities, which will reduce export capacity versus the overall terminal capacity (as some capacity is retained for imports). Hence, 11.8 bcf/d is considered TLNG Export's high (stress) export case with 6 bcf/d (2.19 tcf per year) TLNG Export's base export case. This would represent four export terminals in the Gulf of Mexico: Sabine Pass (2 bcf/d), Freeport (1 bcf/d), Lake Charles (2 bcf/d), and one other (1 bcf/d).

Greenfield capacity is unlikely to be developed. The cost associated with construction of a greenfield terminal is estimated to be at least double the incremental cost of adding liquefaction capability to an existing terminal, making the cost of greenfield supply from the U.S. economically uncompetitive versus other competing options such as Australia, Nigeria, and Canada.

TLNG Export's base export case of 6 bcf/d from 2015 through 2035 is equivalent to increasing cumulative natural gas demand by 46 tcf between 2011 and 2035. TLNG Export's high export case of 11.8 bcf/d from 2015 through 2035 is equivalent to increasing cumulative demand by 92 tcf between 2011 and 2035. The total cumulative demand for domestic natural gas between 2011 and 2035 using the EIA demand projections plus TLNG Export's base and high export cases are as follows:

	Demand for Domestic Natural Gas 2011-2035
No Export Case	629 tcf
Base Export Case	675 tcf
High Export Case	721 tcf

The EIA's 2012 estimate of 2,203 tcf of technically recoverable dry gas resources in the Lower 48 indicates that recoverable resources are more than adequate in the long run to meet domestic demand as well as LNG exports as high as 12 bcf/d. Looking at the recoverable resource base another way, 2,203 tcf is equivalent to:

- 90 years of supply based on 2011 consumption (24.37 tcf per year);
- 75 years of supply based on EIA's projection of 2040 consumption (29.54 tcf per year); and

- 65 years of supply based on EIA's projection of 2040 consumption plus TLNG Export's high export case of 11.8 bcf/d (33.8 tcf per year).

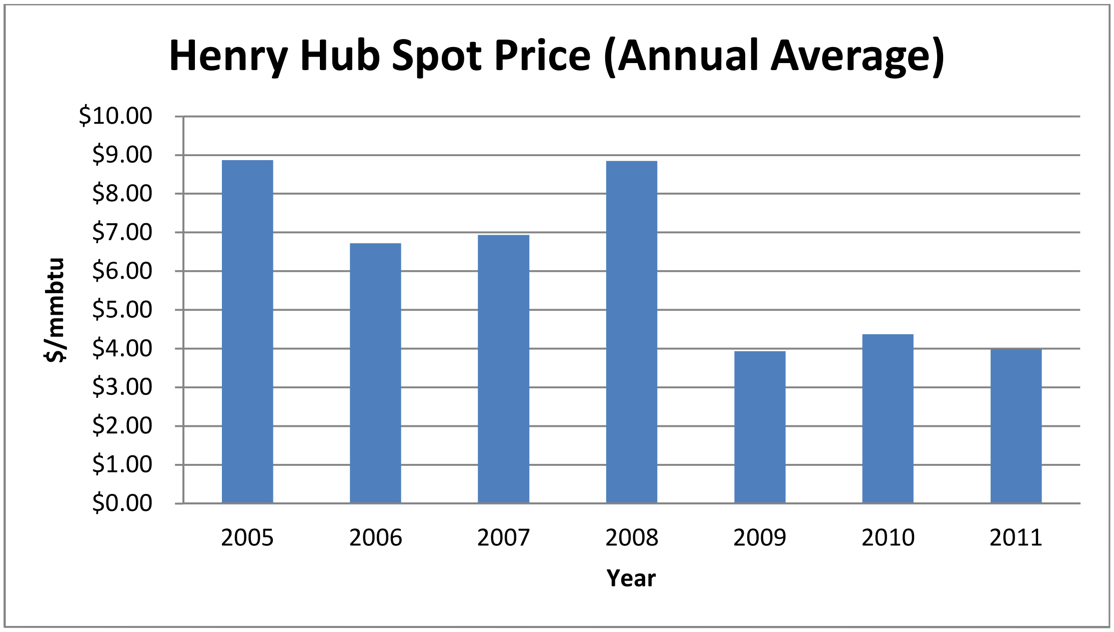
As demonstrated by the foregoing analysis, the natural gas to be exported pursuant to this application will not be needed to meet demand in the U.S., and therefore permitting its export is not inconsistent with the public interest.

(ii) Impact on U.S. Natural Gas Market Prices

Once it is determined that an export will not jeopardize supply to domestic needs during the term of the export, the public interest test of Section 3 of the NGA is met, regardless of the impact of the proposed export on domestic prices. As the Policy Guidelines make clear, it is not the policy of the federal government to manipulate domestic energy prices by approving or disapproving import and export applications.[33] U.S. policy is that markets, and not the government, should allocate resources, determine supply and demand, and set prices. Nonetheless, recent studies show that the proposed export, as well as the likely level of total LNG exports during the term of the proposed authorization, will not have a significant impact on domestic natural gas prices.

The surge in shale gas production and recoverable resource estimates has had a bearish effect on domestic natural gas prices over the last several years. Spot prices at Henry Hub have fallen from an average of $8.85 in 2008 to $3.98 in 2011 (and $2.71 year to date in 2012) as the amount of unconventional shale gas production has increased significantly.

[33] *See supra* note 19 and accompanying text.



The aforementioned 2011 Deloitte Study analyzed the economic impact of LNG exports from the United States, specifically including the volume of LNG sought to be exported from the Lake Charles Terminal in the LCE application (which is the same volume of LNG that is the subject of this Application).[34] The Deloitte Study projected a weighted-average price impact of $0.12/MMBtu on United States prices from 2016 to 2035 as a result of the studied 6 bcf/d of LNG exports.[35] This increase represents a 1.7 percent increase in the projected average United States citygate gas price of $7.09/MMBtu over the studied time period. The Deloitte Study concludes that "the export of 6 Bcfd of LNG should not significantly increase the price of domestic gas"[36] and noted that in the dynamic North American gas market, producers, midstream players, and consumers can act to mitigate the price impact.[37] The Deloitte Study also concluded that the modest price impact from the proposed LNG export volumes is unlikely to cause the

[34] Deloitte Study at 2 ("In the LNG Export Case we represented 6 billion cubic feet per day of LNG exports, approximately equal to the total volume of the three LNG export applications at Sabine Pass, Freeport, and Lake Charles LNG terminals.").
[35] *Id.*
[36] *Id.* at 10.
[37] *Id.* at 2.

United States to be uncompetitive in global markets.[38] This is so, in part, because the United States "has lower gas prices than most industrialized countries and is projected to continue to have lower gas prices, in part due to continued growth in shale gas production."[39]

In 2012, the DOE commissioned a study by NERA Economic Consulting on the macroeconomic impacts of LNG exports from the United States.[40] The NERA Study's findings are in line with the conclusions of the Deloitte Study and both support approval of the instant Application to export LNG from the Lake Charles Terminal. Importantly, the NERA Study concluded that, across all scenarios studied, "the U.S. was projected to gain net economic benefits from allowing LNG exports."[41] Further, the Study concluded that "for every one of the market scenarios examined, net economic benefits increased as the level of LNG exports increased."[42] Although the Study found that United States natural gas prices increase when LNG is exported, "the global market limits how high U.S. natural gas prices can rise under pressure of LNG exports because importers will not purchase U.S. exports if U.S. wellhead price rises above the cost of competing supplies."[43] Further, NERA noted:

> 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 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

---

[38] *Id.* at 13.
[39] *Id.*
[40] NERA Economic Consulting, *Macroeconomic Impacts of LNG Exports from the United States* (Dec. 5, 2012), *available at* http://fossil.energy.gov/programs/gasregulation/reports/nera_lng_report.pdf ("NERA Study").
[41] NERA Study at 1.
[42] *Id.* The NERA Study noted that "even with exports reaching levels greater than 12 Bcf/d and associated higher prices than in constrained cases, there were net economic benefits from allowing unlimited exports in all cases." *See Id*. at 6.
[43] *Id.* at 2.

> export, these costs are more than offset by increases in export revenues along with a wealth transfer from overseas received in the form of payments for liquefaction services. The net result is an increase in U.S. households' real income and welfare.[44]

The NERA Study also concluded that natural gas prices in the United States will not rise to the levels observed in other parts of the world.[45] The Study found that even in the scenarios where unlimited exports were permitted, the wellhead price in the United States remained below the import price in Japan, for example, where the United States sends some of its exports.[46]

Both the Deloitte Study and the NERA Study point to net positive benefits from allowing exports of LNG from the United States. As demonstrated, LNG exports will not have a material adverse impact on domestic natural gas prices. Accordingly, the proposed export is not inconsistent with the public interest.

(iii) <u>Economic Benefits</u>

The requested authorization will benefit local, regional and national economies and is in the public interest. The proposed export of LNG would allow natural gas that might otherwise be shut-in to be sold into the global LNG market, spurring the development of new natural gas resources that might not otherwise make their way to market.

The development of new resources creates new jobs and new opportunities for American workers and is consistent with President Obama's National Export Initiative signed in 2010.[47] The President noted that "[a] critical component of stimulating economic growth in the United States is ensuring that U.S. businesses can actively participate in international markets by increasing their exports of goods . . . . Improved export performance will, in turn, create good

---

[44] *Id.* at 6. The Study concluded "consumers, in the aggregate, are better off as a result of opening up LNG exports" and "the U.S. consumers are better off in all of the export volume scenarios that were analyzed." *See Id.* at 55.
[45] *Id.* at 76.
[46] *Id.*
[47] Exec. Order No. 13534, 75 Fed. Reg. 12433 (March 11, 2010).

high-paying jobs."[48] The National Export Initiative has the goal of doubling exports over the next five years by helping businesses overcome hurdles to entering new export markets, assisting with financing and pursuing a government-wide approach to export advocacy abroad.[49] In his 2011 State of the Union Address, the President stated:

> To help businesses sell more products abroad, we set a goal of doubling our exports by 2014 – because the more we export, the more jobs we create here at home. Already, our exports are up. . . . Now, before I took office, I made it clear that we would enforce our trade agreements, and that I would only sign deals that keep faith with American workers and promote American jobs. That's what we did with Korea, and that's what I intend to do as we pursue agreements with Panama and Colombia and continue our Asia Pacific and global trade talks.[50]

Similarly, in his 2012 State of the Union Address, the President stated:

> Two years ago, I set a goal of doubling U.S. exports over five years. With the bipartisan trade agreements we signed into law, we're on track to meet that goal ahead of schedule. And soon, there will be millions of new customers for American goods in Panama, Colombia, and South Korea. Soon, there will be new cars on the streets of Seoul imported from Detroit, and Toledo, and Chicago. I will go anywhere in the world to open new markets for American products.[51]

Exporting natural gas that is not needed in the United States promotes the President's pro-export policies, while providing a much needed boost to local, regional, and national economies through resource development, an enhanced tax base, job creation and increased overall economic activity. An expansion in available markets for natural gas supplies will have a ripple effect throughout the economy by creating additional employment opportunities.

---

[48] *Id.*
[49] *Id.*
[50] President Barack Obama, State of the Union Address (Jan. 25, 2011), *transcript available at* http://www.whitehouse.gov/the-press-office/2011/01/25/remarks-president-state-union-address.
[51] President Barack Obama, State of the Union Address (Jan. 24, 2012), *transcript available at* http://www.whitehouse.gov/the-press-office/2012/01/24/remarks-president-state-union-address.

As the Lake Charles Terminal is currently equipped only for importing LNG, modifications to the terminal would be required before exports could occur. Such a project would directly benefit the local economy by offering construction and engineering jobs. The manufacturing and supply of the required equipment and materials for the project will result in an investment of approximately $600 million per train, most of which will be sourced from the U.S. The project will require approximately 4.5 million construction man hours per train, generating wages of approximately $120 million. In addition, there will be approximately 200 supervisors and managerial staff required to oversee the construction of each train, adding approximately $140 million in wages. Completing the engineering work on the project (which will likely be done at the contractors' headquarters) will support approximately 150 jobs, creating approximately $100 million in wages for each train.

Granting the requested authorization would also positively impact the U.S. balance of trade. In 2011, the U.S. trade deficit was approximately $560 billion.[52] Notably, of the $560 billion deficit, $326 billion (over half) resulted from a negative balance in the trade of petroleum products.[53] TLNG Export's proposed exports of 15 million metric tons per year will make a positive impact on the balance of trade. The DOE/FE, in approving export applications, has acknowledged the positive impact that LNG exports can have on the balance of trade with destination countries.[54] Moreover, consistent with the aims of the National Export Initiative and the DOE's policy of "promoting competition in the marketplace by allowing commercial parties

---

[52] Bureau of Economic Analysis, U.S. Department of Commerce, *U.S. International Trade in Goods and Services: Annual Revision for 2011*, (June 8, 2012), *available at* http://www.census.gov/foreign-trade/Press-Release/2011pr/final_revisions/11final.pdf.

[53] *Id.* at 11. In 2011, the U.S. exported only $113 billion in petroleum products while importing over $439 billion.

[54] *See, e.g.*, *ConocoPhillips Company*, FE Docket No. 09-92-LNG, Order No. 2731 at 10 (Nov. 30, 2009); *Cheniere Marketing, Inc.*, FE Docket No. 08-77-LNG, Order No. 2651 at 14 (June 8, 2009) ("[M]itigation of balance of payments issues may result from a grant of the [export] application.").

to freely negotiate their own trade arrangements",[55] the export of LNG will help to improve economic trade and ties between the U.S. and the destination countries, which could include key industrialized nations in Europe and Asia, as well as developing nations in Asia, South America, the Middle East, and the Caribbean. This conclusion is supported by the NERA Study which found that "[e]xports of natural gas will improve the U.S. balance of trade and result in a wealth transfer into the U.S."[56] Furthermore, an additional positive economic benefit cited by the NERA Study is the increased Gross Domestic Product ("GDP") that results from LNG exports. Under the Study's Reference Case, GDP increases could range from $5 billion to $20 billion.[57]

Furthermore, it would be inconsistent with U.S. obligations under World Trade Organization ("WTO") Agreements to restrict exports of LNG to other WTO countries except in certain narrow circumstances not applicable here. The U.S. has undertaken commitments not to restrict such exports to other WTO countries, whether directly or indirectly, through quantitative measures or other administrative measures. It would be a further violation of the most-favored-nation obligations under WTO Agreements for the U.S. to grant applications for exports to countries with which the United States has separate FTAs while denying applications for exports to other WTO countries with which the U.S. does not have separate FTAs.

(iv) Environmental Benefits

LNG export can have significant environmental benefits as natural gas is cleaner burning than other fossil fuels. According to the U.S. Environmental Protection Agency ("EPA"), compared to the average air emissions from coal-fired generation, natural gas-fired generation produces half as much carbon dioxide, less than a third as much nitrogen oxides, and one percent

[55] *Cheniere Marketing, Inc.*, FE Docket No. 08-77-LNG, Order No. 2651 at 11 (June 8, 2009).
[56] NERA Study at 13.
[57] *Id.* at 77.

as much sulfur oxides at the power plant.[58] Accordingly, an increased supply of natural gas made possible through LNG export can help countries break their dependence on less environmentally friendly fuels.

VI. ENVIRONMENTAL IMPACT

Presently, the Lake Charles Terminal is equipped for and authorized only to receive imports of LNG. TLNG Export and TLNG will file an application with FERC for authorization to modify the existing authorized facilities for exports, in accordance with NGA Section 3 and subpart B of part 153 of the Commission's Regulations, 18 C.F.R. § 153.4 *et seq*, and Trunkline will file a concurrent application for authorization to construct additional pipeline facilities necessary to provide feed gas to the proposed liquefaction facility with FERC under NGA Section 7 and part 157 of the Commission's Regulations, 18 C.F.R. Part 157.[59]

On March 30, 2012, TLNG Export, TLNG, and Trunkline submitted a Request to Initiate FERC Pre-Filing Review Process in FERC Docket No. PF12-8-000. In the Request, TLNG Export, TLNG, and Trunkline indicated that they plan to file the FERC application in March 2013. On April 6, 2012, FERC issued a letter approving the request to initiate the pre-filing process.

Regarding the proposed export to FTA countries, pursuant to the terms of the National Environmental Policy Act, 42 U.S.C. § 4231 *et seq*. ("NEPA"), while DOE shall give appropriate consideration to the environmental effects of its proposed decisions, as in *Sabine Pass Liquefaction LLC*, that consideration is provided "in light of DOE's statutory obligation to grant the application without delay or modification."[60] That portion of TLNG Export's

---

[58] *See* http://www.epa.gov/cleanenergy/energy-and-you/affect/natural-gas.html.

[59] *See, e.g., Cameron LNG, LLC*, 134 FERC ¶ 61,049 (2011) (FERC amends prior NGA Section 3 import authority to add the additional purpose of exporting LNG).

[60] DOE/FE Order No. 2833 (September 7, 2010) at 5.

Application that seeks authority to export LNG only 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, "falls within Section 3(c), as amended, and therefore, DOE/FE is charged with granting the application without delay or modification."[61]

Regarding the proposed export to non-FTA countries, TLNG Export requests that the DOE/FE issue the export authorization to non-FTA countries conditioned on the FERC's completion of the NEPA review and approval of the facility construction. The DOE/FE routinely issues orders with such a condition.[62]

VII. APPENDICES

The following appendices are included with this Application:

Appendix A	Verification
Appendix B	Opinion of Counsel
Appendix C	LNG Export Capacity

VIII. CONCLUSION

WHEREFORE, for the reasons set forth above, TLNG Export respectfully requests that the DOE/FE issue an order granting TLNG Export long-term authorization to export 15 million metric tons per year for a term of 25 years of domestic LNG to (1) any country with which the United States currently has, or in the future enters into, an FTA requiring national treatment for trade in natural gas; and (2) any country with which the United States does not have an FTA

[61] *Id.*

[62] *See e.g., Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961 at 41 (May 20, 2011); *Yukon Pacific Corp.*, ERA Docket No. 87-68-LNG, Order No. 350 (Nov. 16, 1989) ("The DOE believes that energy projects can and must be undertaken consistent with environmentally acceptable practices. To ensure this result, the DOE is attaching a condition to the export approval that all aspects of the export project must be undertaken in accordance with the appropriate environmental review process and must comply with any and all preventative and mitigative measures imposed by Federal or State agencies."); *see also Rochester Gas and Electric Corp.*, FE Docket No. 90-05-NG, Order No. 503 (May 16, 1991).

requiring the national treatment for trade in natural gas with which trade is not prohibited by United States law or policy.

As demonstrated herein, the authorization requested is not inconsistent with the public interest and, accordingly, should be granted pursuant to Section 3 of the Natural Gas Act.

Respectfully submitted,

Marshall S. ("Mackie") McCrea III
President and Chief Operating Officer
Trunkline LNG Export, LLC

James F. Moriarty
Locke Lord LLP

On behalf of Trunkline LNG Export, LLC

Dated: January 9, 2013

APPENDIX A

VERIFICATION

VERIFICATION

County of Bexar)
)
State of Texas)

BEFORE ME, the undersigned authority, on this day personally appeared Marshall S. McCrea III, who, having been by me first duly sworn, on oath says that he is the President and Chief Operating Officer of Trunkline LNG Export, LLC and is duly authorized to make this Verification on behalf of Trunkline LNG Export, LLC; 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.

SWORN TO AND SUBSCRIBED before me on: 1/9/13

JAMIE DIANE BYNUM
Notary Public, State of Texas
My Commission Expires
May 20, 2014

Jamie Diane Bynum
Notary Public

APPENDIX B

OPINION OF COUNSEL

January 9, 2013

Mr. John A. Anderson
Office of Fossil Energy
U.S. Department of Energy
Docket Room 3F-056, FE-50
Forrestal Building
1000 Independence Avenue, S.W.
Washington, DC 20585

RE: Trunkline LNG Export, LLC
Application for Long-Term Authorization to Export Liquefied Natural Gas

Dear Mr. Anderson:

This opinion of counsel is submitted pursuant to Section 590.202(c) of the regulations of the U.S. Department of Energy, 10 C.F.R. § 590.202(c) (2010). The undersigned is counsel to Trunkline LNG Export, LLC. I have reviewed the corporate documents of Trunkline LNG Export, LLC and it is my opinion that the proposed export of natural gas as described in the application filed by Trunkline LNG Export, LLC to which this Opinion of Counsel is attached as Appendix B, is within the limited liability company powers of Trunkline LNG Export, LLC.

Respectfully submitted,

Thomas P. Mason

Thomas P. Mason
Senior Vice President and General Counsel
Trunkline LNG Export, LLC

APPENDIX C

LNG Export Capacity

	US LNG Import Terminals	Location	Status	Import Capacity - Current Bcf/d	Import Capacity - Expanded Bcf/d	High Case Bcf/d	Base Case Bcf/d
1	Everett	Atlantic Coast	In Operation	1.0	1.0	Unlikely	Unlikely
2	Cove Point	Atlantic Coast	In Operation	1.8	1.8	1.8	Unlikely
3	Lake Charles	Gulf Coast	In Operation	2.1	2.1	2.0	2.0
4	Elba Island	Gulf Coast	In Operation	1.6	2.1	Unlikely	Unlikely
5	North-East Gateway	Offshore	In Operation	0.8	0.8	N/A	N/A
6	Freeport LNG	Gulf Coast	In Operation	1.5	2.5	1.5	1.0
7	Sabine Pass	Gulf Coast	In Operation	4.0	4.0	4.0	2.0
8	Sempra LNG	Gulf Coast	In Operation	1.8	2.5	2.5	1.0
9	Neptune	Offshore	In Operation	0.4	0.4	N/A	N/A
10	Golden Pass	Gulf Coast	In Operation	1.0	2.0	Unlikely	Unlikely
11	Gulf LNG Clean Energy	Gulf Coast	In Operation	1.5	1.5	Unlikely	Unlikely
				17.5	**20.7**	**11.8**	**6.0**

Notes

Source - DOE Website

**announced expansions*

Scenarios:

Offshore terminals not applicable for expansions

Everett and Elba Island unlikely to be converted due to supply commitments

Golden Pass unlikely to be converted as part of the Ras Laffan supply chain

Gulf Clean Energy unlikely to be converted due to footprint limitations

Base Case:

4 Gulf of Mexico Terminals (largely bi-directional)

High Case:

4 Gulf of Mexico Terminals plus Cove Point (export only)