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April 10, 2015

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

**RE: Texas Brownsville LNG LLC, Docket No. 15- 62 -LNG
Application for Long-Term Authorization to Export Liquefied Natural Gas**


Dear Mr. Anderson:

Enclosed for filing on behalf of Texas LNG Brownsville LLC ("Texas LNG"), please find attached application for long-term, multi-contract authorization to engage in exports of natural gas in the form of liquefied natural gas ("LNG").

Texas LNG seeks authorization to export for a twenty-five (25) year period on its own behalf and as an agent for others, up to 4 MTA (million tonnes per annum) of LNG, which is equivalent to approximately 550 MMcf/d or 0.55 Bcf/d or approximately 200 Trillion Btu/year, 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.

Enclosed is a check in the amount of \$50.00 in payment of the applicable filing fee pursuant to 10 C.R.F. § 590.207. Should you have any questions about the foregoing, please feel free to contact the undersigned.

Sincerely,


William S. Garner, Jr.
Shareholder

WSG/lpd
Enclosures

- ALBANY
- AMSTERDAM
- ATLANTA
- AUSTIN
- BOCA RATON
- BOSTON
- CHICAGO
- DALLAS
- DELAWARE
- DENVER
- FORT LAUDERDALE
- HOUSTON
- LAS VEGAS
- LONDON*
- LOS ANGELES
- MEXICO CITY*
- MIAMI
- MILAN**
- NEW JERSEY
- NEW YORK
- NORTHERN VIRGINIA
- ORANGE COUNTY
- ORLANDO
- PHILADELPHIA
- PHOENIX
- ROME**
- SACRAMENTO
- SAN FRANCISCO
- SEOUL*
- SHANGHAI
- SILICON VALLEY

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

Texas LNG Brownsville LLC

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Docket No. 15- _____ LNG

**APPLICATION OF TEXAS LNG BROWNSVILLE LLC FOR
LONG-TERM, MULTI-CONTRACT AUTHORIZATION
TO EXPORT LIQUEFIED NATURAL GAS TO
FREE TRADE AGREEMENT AND
NON-FREE TRADE AGREEMENT NATIONS**

April 3, 2015

UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL FUELS

TEXAS LNG BROWNSVILLE LLC DOCKET NO. 15-____-LNG

**APPLICATION OF TEXAS LNG BROWNSVILLE LLC FOR
MULTI-CONTRACT LONG TERM AUTHORIZATION TO
EXPORT LIQUEFIED NATURAL GAS TO FREE TRADE AND
NON-FREE TRADE AGREEMENT COUNTRIES**

Pursuant to Section 3 of the Natural Gas Act (“NGA”), 15 U.S.C. § 717b (2006), and Part 590 of the Department of Energy’s (“DOE”) regulations, 10 C.F.R. Part 590 (2012), Texas LNG Brownsville LLC (“Texas LNG”) hereby requests that DOE, Office of Fossil Energy (“FE”), grant long-term, multi-contract authorization for a twenty-five (25) year period on its own behalf and as an agent for others, for Texas LNG to engage in exports of up to 4 MTA (million tonnes per annum) of liquefied natural gas (“LNG”), which is equivalent to approximately 550 MMcf/d or 0.55 Bcf/d or approximately 200 Trillion Btu/year.

Texas LNG is seeking authorization to export LNG from its proposed Texas LNG Brownsville LLC Liquefied Natural Gas Export Project (“Project”), to be located at the Port of Brownsville, Texas 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.

Texas LNG is seeking this export authorization in conjunction with its proposal to develop, own and operate the Project. The Project will include two, 2 MTA LNG trains. The trains will be

installed in two phases. Phase 1 will be constructed upon receipt of all required governmental authorizations and Phase 2 will be constructed based upon market demand. Phase 1 LNG production will be stored in one single containment storage tank of 210,000 cubic meters (m³) capacity and Phase 2 will include a second, similar, single containment storage tank. A single LNG tanker loading berth with a dredged slip connected to the Port of Brownsville shipping channel will be constructed to accommodate LNG vessels. The Project site, which has approximately three thousand (3000) feet of frontage on the Brownsville Ship Channel, is well-positioned to provide access for loading of LNG vessels. The site is located approximately 5 miles from the Gulf of Mexico shoreline. It also is accessible by Texas State Highway 48 which runs along the northwest boundary of the site.

An intrastate natural gas pipeline, owned and operated by a third party, will deliver natural gas to the Project gate station. The gate station will include a pig receiver, a filter/separator, custody transfer meter(s), an emergency shutdown valve and a gas analyzer. Feed gas for the LNG terminal would be transported to the site boundary by the approximate 150-mile intrastate pipeline, connecting the Project, the City of Brownsville, potential natural gas-fired power plants and other industrial projects within the Port of Brownsville area to the Agua Dulce natural gas Hub near Corpus Christi, Texas. Texas LNG is in discussion with a number of parties who have expressed interest in building and owning this intrastate pipeline.

TEXAS LNG DOE FTA/NON-FTA NATURAL GAS EXPORT AUTHORIZATION APPLICATION

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1. COMMUNICATIONS AND CORRESPONDENCE

Communications and correspondences regarding this Application should be addressed to the following:

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2. DESCRIPTION OF THE APPLICANT

The exact legal name of the applicant is Texas LNG Brownsville LLC, a limited liability company organized under the laws of Delaware. Texas LNG's address is 700 Louisiana Street, Suite 3950, Houston, Texas 77002.

The Project was originally conceived and developed by Texas LNG LLC. On December 31, 2013, Texas LNG LLC filed in FE Docket No. 13-160-LNG for FTA and non-FTA export authorization for up to the equivalent of 0.275 Bcf of natural gas per year, or approximately two MTA, from the Project. The Application was supplemented by a filing dated April 27, 2014. The DOE/FE issued the requested FTA authorization in DOE/FE Order No. 3443 (June 22, 2014). The non-FTA export authorization Application in the Docket remains pending. This FTA authorization and non-FTA application in Docket No. 13-160-LNG shall remain in effect until the DOE/FE acts on the authorization requested in this new docket, at which time Texas LNG LLC shall request that Docket No. 13-160-LNG be novated.

As explained in the prior export application, Texas LNG LLC was wholly owned by its members Vivek Chandra and Langtry Meyer. The ownership of Texas LNG LLC now includes Michael Maloney and Samsung Engineering Co. Ltd. of Seoul, South Korea, a company organized and existing under the laws of Korea. Samsung Engineering Co. owns less than 10% of Texas LNG LLC. Mr. Chandra now holds approximately 39%; Mr. Meyer, 37%; and Mr. Maloney 16%. For purposes of further developing and financing the Project, Texas LNG Brownsville LLC was created to hold the Project interests. The ownership of Texas LNG Brownsville LLC is Third Point LNG Aggregator LLC (a Delaware limited liability company of New York, New York) (less than 10%), Third Point Partners Qualified L.P. (a Delaware limited partnership of New York, New York) (less than 10%), and Third Point Partners L.P. (a Delaware limited partnership of New York, New York) (less than 10%) with Texas LNG LLC owning the remaining percentage. The Third Point entities are subsidiaries of Third Point LLC, a Delaware limited liability company headquartered in New York, New York.

3. DESCRIPTION OF EXPORT TERMINAL

Texas LNG seeks long-term authorization to export domestically produced LNG from the Texas LNG facility to be constructed at the Port of Brownsville in Brownsville, Texas to free trade agreement and non-FTA countries. Texas LNG will construct, own, and operate the Project which will have a planned capacity up to 4 MTA (million tonnes per annum) which is equivalent to approximately 550 MMcf/d or 0.55 Bcf/d, and be developed as tolling facility to process treated pipeline gas sourced from the US natural gas pipeline network into LNG for export to FTA and non-FTA markets. LNG offtakers will be responsible for contracting feed gas deliveries to the plant as well as ships to export the LNG. Texas LNG will facilitate introductions to potential feed gas suppliers.

The current business model, subject to modification, envisages that Texas LNG will be a toll processor of natural gas into LNG and a producer of extracted natural gas liquids, without taking ownership of the feed gas or the produced LNG. Texas LNG will be compensated through a fixed and variable toll by LNG offtakers who will contract to purchase feed gas from gas producers and trading organizations. The fixed (capacity) portion is expected to cover capital expenses, financing, overhead, labor, and land lease. The variable (operating) charge will cover energy consumed in the process and other variable costs.

The Project is planned to be located near the entrance of the Brownsville ship channel, on an approximate 625-acre parcel of land inside the Port of Brownsville (“the Port”), exclusively available through a lease option agreement between Texas LNG and the Brownsville Navigation District of Cameron County, Texas (please see Exhibit A for copy of lease option agreement which has been redacted in minor part to omit commercially sensitive information). The Texas LNG Terminal will be located in an area zoned for heavy industrial use and will be consistent with other industrial facilities along the shoreline. The coordinates of the proposed Project site can be found in Figure 1. There is minimal habitation or other activity in the immediate vicinity of the land parcel.



This image depicts Texas LNG's planned 625 acre liquefaction site at the Port of Brownsville.

Figure 1: Texas LNG Plot Location

The Project involves LNG process modules fabricated at an experienced and qualified shipyard, and transported to the Port of Brownsville. At the Texas LNG location, the modules will be installed permanently on the site. Produced LNG will be stored in a single containment LNG storage tank(s) of 210,000 m³ and offloaded to conventional LNG tankers berthed at the site. Off-the-shelf technology will be used for both the liquefaction process and the gas treatment plant that will be built on site to treat pipeline feed gas by remove any remaining natural gas liquids and other non-methane products before the liquefaction process. Please refer to Figure 2 for a representation of the Project.

This engineering development strategy is designed to allow Texas LNG to minimize complex onshore civil construction works, leverage local labor and skills, and reduce the overall local environmental impact.

The liquefaction plant will use the APCI propane-mixed refrigerant (C3-MR) process. The gas exiting the pretreatment plant will be cooled in four kettle-type shell and tube heat exchangers. Each of the kettle exchangers will contain propane refrigeration on the shell side and feed gas on the tube side. The heat removed from the feed gas will vaporize propane. The vaporized propane will be compressed to the condensing temperature by propane refrigerant compressors.

Samsung Engineering of Seoul, South Korea, (“Samsung”) one of the world’s leading engineering, procurement, construction and project management companies, has completed conceptual design, pre-Front End Engineering and Design (pre-FEED) for the Project. Samsung is currently supporting the project with FEED engineering and is positioned to be the engineering and construction contractor for the Project.



This image depicts Texas LNG’s planned liquefaction facilities.

Figure 2: Texas LNG Export Terminal

4. AUTHORIZATION REQUESTED

Texas LNG requests authorization to export up to the equivalent of approximately 4 MTA of domestically produced LNG which is equivalent to approximately 550 MMcf/d or 0.55 Bcf/d over a twenty-five (25) year period commencing on the earlier of the date of first export or ten (10) years from the date the requested authorization is granted to export LNG from export terminals to be constructed in Brownsville 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.

Texas LNG requests such export authorization on its own behalf and as agent for others. To ensure all exports are permitted and lawful under United States laws and policies, Texas LNG will comply with all DOE requirements for an exporter or agent. As set forth in DOE/FE Order No. 2986.9 Texas LNG will register with DOE/FE each LNG title holder for whom Texas LNG seeks to export LNG.

The long-term, multi-contract authorization sought in this Application is necessary to permit Texas LNG to proceed to incur the substantial cost of developing the liquefaction and export project. The terms and conditions related to the use of the Texas LNG Terminal facilities will be set forth in agreements with Project customers. Texas LNG anticipates that these agreements will be for terms of up to twenty-five (25) years in duration and will run concurrently with Texas LNG's export authorization. Texas LNG has not yet entered into such agreements because long-term export authorization is required to finalize agreements with prospective customers.

DOE/FE's regulations require applicants to submit information regarding the terms of the transaction, including long-term supply agreements and long-term export agreements. In prior orders, DOE/FE has found that applicants need not submit this information with their applications if such transaction specific information is not available because neither the supply contracts nor the long-term export contracts have been executed. In such instances, DOE/FE has permitted applicants to submit

such information if and when the contracts are executed. DOE/FE has found that this conforms to the requirement in its regulations that such information be submitted “when practicable.” Texas LNG requests that DOE/FE make the same finding in this proceeding.

The FTA authorization and non-FTA application in Docket No. 13-160-LNG shall remain in effect until the DOE/FE acts on the authorization requested in this Docket, at which time Texas LNG LLC shall request that Docket No. 13-160-LNG be novated.

5. EXPORT SOURCES

Texas LNG seeks authorization to export natural gas available from the United States' natural gas pipeline supply and transmission system. Given the size and liquidity of the natural gas market in the Gulf Coast region and the significant growth of unconventional resources in the nation, a diverse and reliable source of natural gas will be available to support the requested Export Authorization. Texas LNG anticipates that the sources of natural gas will include supplies from various producing regions, including conventional gas and recent shale gas discoveries in Rocky Mountain, Mid Continent, and Permian regions including the Haynesville, Eagle Ford, Barnett, Floyd-Neal/Conasauga, and other shale plays, estimated to contain 553 trillion cubic feet ("Tcf") of recoverable gas.

Texas LNG will strive, where possible, to source a portion of its feed gas from gas that is currently being flared or otherwise vented, thus providing a positive environmental benefit.

Texas LNG will facilitate contractual arrangements between LNG purchasers and natural gas suppliers, including exploration and production companies, pipeline companies and gas traders. The size of traditional and emerging natural gas supply sources in close proximity to the Texas LNG Terminal will provide Texas LNG's potential LNG customers with diverse and reliable alternative gas supply options.

Feed gas for the Project would be transported to the site boundary via an approximate 150-mile pipeline, anticipated to be operated as an intrastate pipeline, connecting the plant, the City of Brownsville, potential natural gas-fired power plants and other industrial projects near the Port of Brownsville. The pipeline likely would originate at the Agua Dulce Hub located near Corpus Christi, Texas. The Agua Dulce Hub is a relatively liquid marketing point with multiple inter-and intrastate pipelines transiting through the area. Interconnecting pipelines in the Agua Dulce area include Texas Eastern Transmission, Tennessee Gas Pipeline Company LLC, Enterprise Products Partners, Energy Transfer, South Cross, Houston Pipeline, Kinder Morgan Tejas Pipeline LLC, and others.

6. PUBLIC INTEREST STATEMENT

Texas LNG'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 natural gas 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.¹

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, a 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.

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

¹15 U.S.C. § 717b(c) (2009).

such modification and upon such terms and conditions as the [Secretary] may find necessary or appropriate.²

According to the DOE/FE, “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.”³ To overcome this rebuttable presumption an opponent must affirmatively demonstrate that the proposal is inconsistent with the public interest.⁴

In evaluating the “public interest” the DOE/FE looks to a number of different factors, including “economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others.”⁵ Consistent with its Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, DOE/FE examines whether “domestic supply shortages or domestic security needs overcome the statutory presumption that a proposed export is not inconsistent with the public interest.”⁶ While the Policy Guidelines deal specifically with imports, the DOE/FE has found that the principles are applicable to exports.⁷ The Policy Guidelines are intended to “minimize federal control and involvement in energy markets and to promote a balanced and mixed energy resources system.”⁸

According to the DOE/FE:

²15 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).

³*Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC*, DOE/FE Order No. 3282 at 5-6 (“Order No. 3282”); *Sabine Pass Liquefaction, LLC*, DOE, FE Order No. 2961 at 28 (“Order No. 2961”); 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.”).

⁴Order No. 3283 at 6; 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.”).

⁵Order No. 3282 at 6.

⁶Order No. 3282 at 6-7; Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, 49 Fed. Reg. 6,684 (Feb. 22, 1984) (“Policy Guidelines”).

⁷Order No. 3282 at 7; *Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order No. 1473 at 14; see also, Order No. 2961 at 28.

⁸Order No. 3282 at 7.

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.⁹

DOE/FE looks to the evidence developed in the record of each application proceeding to make its determination.¹⁰ As demonstrated herein, Texas LNG's application is not inconsistent with the public interest.

As U.S. natural gas reserves and production have risen, U.S. natural gas prices have fallen to the point where they are among the lowest in the world. The exportation of LNG will also create a material improvement in the United States' balance of trade. These benefits will be obtained with only a minimal effect on domestic natural gas prices. At current and forecasted rates of demand, the United States, natural gas reserves will meet demand for 100 years.

In its series of recent orders authorizing non-FTA LNG exports, DOE/FE has repeatedly explained that it "continues to subscribe to the principle set forth in our 1984 Policy Guidelines that, under most circumstances, the market is the most efficient means of allocating natural gas supplies."¹¹ The agency has promoted the competitive, free-trade policies embodied in the Policy Guidelines authorizing LNG exports to non-FTA nations in each of its recent decisions concerning non-FTA exports, and it should continue to follow this course here.

While NGA section 3(a) establishes a broad public interest standard and a presumption favoring export authorizations, the statute does not define "public interest" or identify the criteria that must be considered. In its prior decisions, however, DOE/FE has explained that its review of export

⁹Policy Guidelines at 6685.

¹⁰Order No. 3282 at 7.

¹¹*Freeport LNG Expansion, L.P.*, Order No. 3282 at 112 (Nov. 15, 2013); *Lake Charles Exports*, Order No. 3324 at 125 (Aug. 7, 2013); *Dominion Cove Point LNG, LP*, Order No. 3331 at 141 (Sept. 11, 2013); *Freeport LNG*, Order No. 3357 at 154 (Nov. 15, 2013); *Cameron LNG, LLC*, DOE/FE Order No. 3391 at 132 (Feb. 11, 2014); *Jordan Cove Energy Project, L.P.*, Order No. 3413 at 143 (March 24, 2014); *Oregon LNG*, Order No. 3465 at 141 (July 31, 2014).

applications focuses on (i) the domestic need for the natural gas proposed to be exported, (ii) whether the proposed exports pose a threat to the security of domestic natural gas supplies, (iii) whether the arrangement is consistent with DOE/FE's policy of promoting market competition, and (iv) any other factors bearing on the public interest.¹² In addition, DOE/FE also has identified a range of factors that it evaluates when reviewing an application for export authorization. These factors include economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others.¹³

Granting Texas LNG its requested authorization to export LNG will be consistent with, and indeed advance, the public interest. The general benefits of LNG exports are well known to DOE/FE. Faced with multiple LNG export proposals, DOE/FE undertook an in-depth two part study of the cumulative economic impact of LNG exports. The first part of the study was conducted by the Energy Information Agency (EIA) and evaluated the potential impact of additional LNG exports on domestic energy consumption, production and prices under several export scenarios. The second part of the study, performed by NERA Economic Consulting ("NERA"), assessed the potential macroeconomic impact of LNG exports using its energy-economy model. The two studies, as well as the results of the extensive notice and comment process undertaken by DOE/FE seeking public comments on them, are summarized in detail in each of the recent DOE/FE orders authorizing LNG exports to non-FTA countries.¹⁴

¹²*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; *Freeport LNG*, Order No. 3357 at 9; *Cameron LNG*, Order No. 3391 at 8; *Jordan Cove*, Order No. 3413 at 8; *Oregon LNG*, Order No. 3465 at 8.

¹³*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 at 6-7; *Jordan Cove*, Order No. 3413 at 6-7; *Oregon LNG*, Order No. 3465 at 7.

¹⁴*Freeport LNG*, Order No. 3282 at 30-109; *Lake Charles Exports*, Order No. 3324 at 42-121; *Dominion Cove Point LNG*, Order No. 3331 at 56-134; *Freeport LNG*, Order No. 3357 at 31-50 and 91-143; *Cameron LNG*, Order No. 3391 at 23-42 and 71-125; *Jordan Cove*, Order No. 3413 at 26-51 and 82-136; *Oregon LNG*, Order No. 3465 at 29-54 and 78-132.

As DOE/FE has summarized, two of the key findings of the NERA study are the following:

- Across all the scenarios studied, NERA projected that the United States would gain net economic benefits from allowing LNG exports. For every market scenario examined, net economic benefits increased as the level of LNG exports increased. Scenarios with unlimited exports had higher net economic benefits than corresponding cases with limited exports. In all cases, the benefits that come from export expansion outweigh the losses from reduced capital and wage income to U.S. consumers, and hence LNG exports have net economic benefits in spite of higher domestic natural gas prices.
- U.S. natural gas prices would increase if the United States exports LNG. However, 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. Natural gas price changes attributable to LNG exports remain in a relatively narrow range across the entire range of scenarios.¹⁵

DOE/FE has held repeatedly that the NERA study is fundamentally sound and supports the proposition that the United States will experience net economic benefits from LNG exports and that proposed exports of LNG are not inconsistent with the public interest.¹⁶ Moreover, NERA's fundamental findings that the country will benefit from the export of domestically produced LNG are confirmed by numerous other persuasive studies, including but not limited to:

- Charles Ebinger *et. al.*, "Liquid Markets: Assessing the case for U.S. Exports of Liquefied Natural Gas," Brookings Institution (May 2012) (hereinafter, "Ebinger/Brookings");
- Michael Levi, "A Strategy for U.S. Natural Gas Exports," The Hamilton Project, Brookings Institution (June 2012) (hereinafter, "Levi/Brookings");
- Kenneth B. Medlock II, Ph.D., "U.S. LNG Exports: Truth and Consequences," Energy Forum at the James A. Baker Institute for Public Policy, Rice University (August 2012) (hereinafter, "Medlock/Baker");
- Deloitte, "Exporting the American Renaissance: Global Impacts of LNG Exports from the United States" (October 2012) (hereinafter "Deloitte");

¹⁵*Freeport LNG*, Order No. 3282 at 40-41; *Lake Charles Exports*, Order No. 3324 at 52-53; *Dominion Cove Point LNG*, Order No. 3331 at 66-67; *Freeport LNG*, Order No. 3357 at 41-42; *Cameron LNG*, Order No. 3391 at 33-34; *Jordan Cove*, Order No. 3413 at 37-38; *Oregon LNG*, Order No. 3465 at 39-40. These findings are also set forth in the Executive Summary of NERA Study itself at pages 1-2. Macroeconomic Impacts of LNG Export from the United States, NERA Economic Consulting, at 1-2, available at: http://www.fossil.energy.gov/programs/gasregulation/reports/nera_lng_report.pdf

¹⁶*Freeport LNG*, Order No. 3282 at 110; *Lake Charles Exports*, Order No. 3324 at 123; *Dominion Cove Point LNG*, Order No. 3331 at 140; *Freeport LNG*, Order No. 3357 at 153; *Cameron LNG*, Order No. 3391 at 130-31; *Jordan Cove*, Order No. 3413 at 141; *Oregon LNG*, Order No. 3465 at 139.

- ICF International, “U.S. LNG Exports: Impacts on Energy Markets and the Economy” (May 2013) (hereinafter “ICF”)

These studies are all publicly available,¹⁷ and Texas LNG hereby incorporates each of them into the record here as supporting of the public interest supporting its proposed LNG exports.

NERA has itself updated its 2012 Study, and the update was recently filed with DOE/FE by Sabine Pass Liquefaction.¹⁸

The updated study utilized more recent data than the 2012 NERA study and provided a complete analysis of scenarios in which no limitations were put on the level of U.S. LNG exports and the exports exceeded the 12 Bcf per day maximum specified in the earlier study. The key results of the updated NERA study include the following:

- In all the scenarios studied, NERA found that the U.S. would experience net economic benefits from increased LNG exports.
- Across all the scenarios, U.S. economic welfare consistently increases as the volume of natural gas exported increases. Unlimited exports always create greater benefits than limited exports in comparable scenarios.
- A comparison of the updated NERA study with its prior study indicated greater LNG export potential at lower prices than previously estimated. Higher levels of exports are shown in nearly all scenarios at lower prices than in the previous study. That is, the results show an expectation of the U.S. exported greater amounts of LNG at lower gas prices than in the NERA study that DOE/FE has previously relied upon in authorizing exports.

At the request of DOE/FE, EIA recently conducted a new study of the “Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets.”¹⁹ This new EIA study addresses

¹⁷See Ebinger/Brookings at http://www.brookings.edu/~media/Research/Files/Reports/2012/5/02%20lng%20exports%20ebinger/050_2_lng_exports_ebinger.pdf; Levi/Brookings at <http://www.brookings.edu/research/papers/2012/06/13-exports-levi>; Medlock/Baker at http://bakerinstitute.org/publications/US%20LNG%20Exports%20-%20Truth%20and%20Consequence%20Final_Aug12-1.pdf; Deloitte at http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/Energy_us_er/us_er_GloballImpactUSLNGExports_American_Renaissance_Jan2013.pdf; and ICF at <http://www.api.org/~media/Files/Policy/LNG-Exports/API-LNG-Export-Report-by-ICF.pdf>

¹⁸Sabine Pass submitted the updated NERA study on February 28, 2014 in Docket Nos. 13-30-LNG, 13-42-LNG and 13-121-LNG. Sabine Pass’ filing with the study is available on DOE/FE’s website at: http://www.fossil.energy.gov/programs/gasregulation/authorizations/2013_applications/Supplement_to_application02_28_14.pdf

scenarios of total LNG exports from the Lower 48 States of 12 Bcf per day (“Bcf/d”), 16 Bcf/d, and 20 Bcf/d, with the exports phased in at a rate of 2 Bcf/d each year beginning in 2015, in the context of the baseline cases from EIA’s 2014 Annual Energy Outlook (“AEO 2014”). The key results of the new EIA study include the following:²⁰

- Projected average residential natural gas prices are projected to increase by from 2% in the 12 Bcf/d scenario to 5% in the 20 Bcf/d scenario, compared to the base projections over the 2015-40 period, with a slower, more realistic ramp-up scenario resulting in lower price impacts;
- Increased natural gas production is projected to satisfy 61% to 84% of the increase in natural gas demand from LNG exports;
- Natural gas bills paid by end-use consumers are projected to increase by 1 to 8%, and electricity bills for end-use consumers increase by 0 to 3%, over the comparable baseline cases depending on the scenario; and
- LNG exports will result in higher economic output, with economic gains (measured as changes in the level of GDP relative to the baseline), ranging from 0.05 to 0.17%, generally increasing with greater LNG exports: EIA notes that these estimates do not address several key economic linkages that may increase economic benefits.

42-LNG, and 13-121-LNG, and Texas LNG hereby incorporates it by reference into this proceeding.

C. Public Interest

In addition, US LNG exports will have economic multiplier effects. LNG exports would have only moderate impacts on domestic natural gas prices.

As Professor Richard Schmalensee, Director of the MIT Center for Energy and Environmental Policy Research, noted:

“One of the great strengths of the U.S. economy historically has been our flexibility and our ability to react quickly and effectively to changes in the global marketplace. Restricting LNG exports would be resisting what we are good at, which is reacting to change.”²¹

Positive Overall Economic Impacts

¹⁹This new EIA study, which was released on October 29, 2014, is available at: <http://www.eia.gov/analysis/requests/fe/>

²⁰*Id.* These key results are set forth in the Summary of Results at pages 12-13 of the study.

²¹“Should Free Trade Principles Apply to U.S. Exports of Liquefied Natural Gas?”, Page 4, <http://accf.org/should-free-trade-principles-apply-to-u-s-exports-of-liquefied-natural-gas/>

ICF International was commissioned by the American Petroleum Institute (API) to undertake a study of the economic impacts of LNG exports. The following table shows the positive impact of LNG exports in employment, GDP, and natural gas prices attributed to LNG exports between 2016 and 2035 in three export scenarios.²²

Impact (2016-2035 Averages)*	LNG Export Case (Change from Zero Exports Case)		
	ICF Base Case (up to ~4 Bcfd)	Middle Exports Case (up to ~8 Bcfd)	High Exports Case (up to ~16 Bcfd)
Employment Change (No.)	73,100-145,100	112,800-230,200	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

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

Figure 1: Key Economic Impacts Relative to the Zero Exports Case (Source: ICF)

The NERA Study commissioned by the DOE, is consistent with ICF’s findings and emphasizes the positive benefits to U.S. GDP from LNG exports and that those benefits increase as the volume of exports rise.

“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.”²³

According to Shale Gas and US National Security, a report published in 2011 by the James A. Baker III Institute for Public Policy at Rice University (the “Baker Institute Report”), “full development of commercial shale gas resources in the United States will have multiple beneficial effects for U.S. energy security and national interests.” The United States has developed a massive natural gas resource base that is sufficient to supply domestic demand for a century, even with significant exports of LNG. The Export Authorization will not adversely affect U.S. energy security.

²²ICF International, “U.S. LNG Exports: Impacts on Energy Markets and the Economy”, May 15, 2013.

²³NERA, on behalf of DOE, “Macroeconomic impacts of LNG Exports from the U.S.”, December 2012, page 6

GDP Growth

The net effect on annual U.S. GDP of LNG exports is expected to be positive at about \$15.6 to \$73.6 billion annually between 2016 and 2035, depending on LNG export case and GDP multiplier effect. This includes the impacts of additional hydrocarbon liquids that would be produced along with the natural gas, greater petrochemical (olefins) production using more abundant natural gas liquids feedstock, and all economic multiplier effects.²⁴

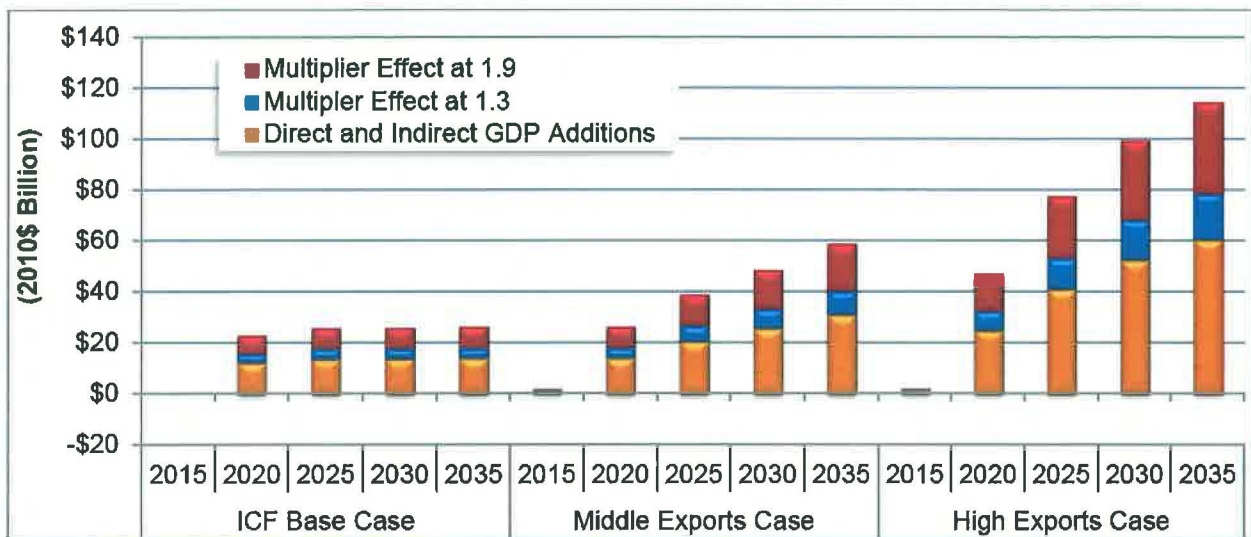


Figure 2: Total Impacts on GDP by LNG Export Case (Source: ICF)

Employment Growth

The net effects on U.S. employment from LNG exports are projected to be positive with average net job growth of 73,100 to 452,300 between 2016 and 2035, including all economic multiplier effects (“M.E.”). Manufacturing job gains average between 7,800 and 76,800 net jobs between 2016 and 2035, including 1,700-11,400 net job gains in the specific manufacturing sectors that include refining, petrochemicals, and chemicals.²⁵

Employment is expected to increase across all major sectors.

²⁴ICF International, “U.S. LNG Exports: Impacts on Energy Markets and the Economy”, May 15, 2013.

²⁵Ibid

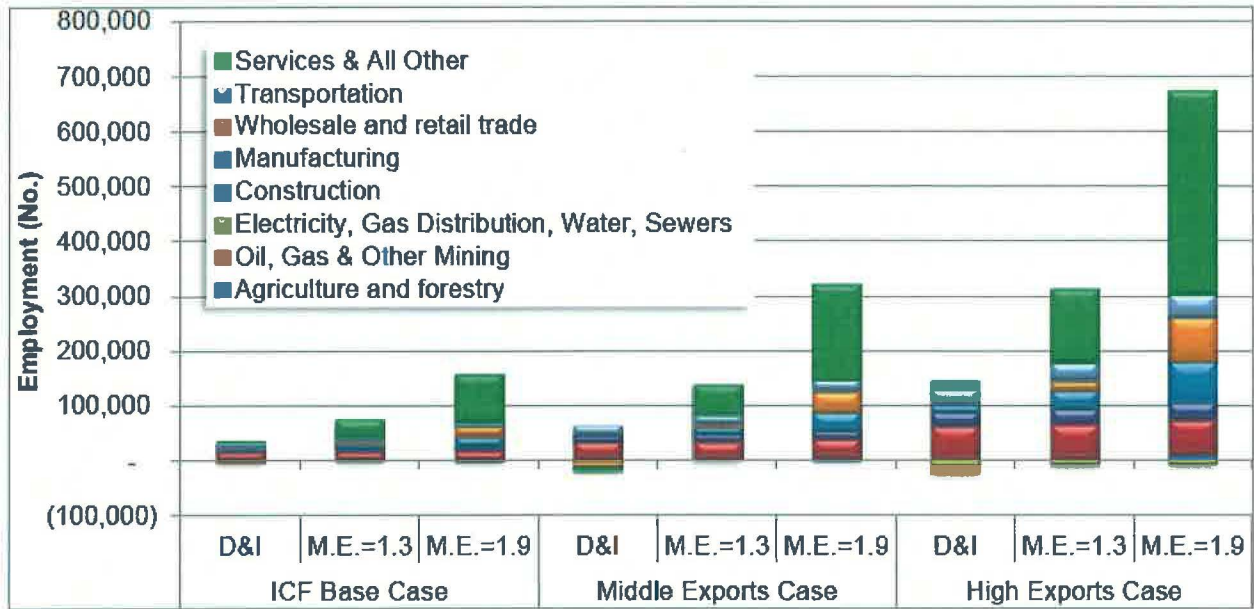


Figure 3: Change in Direct, Indirect, and Induced Employment by Sector (2035) (Source: ICF)

LNG exports lead to increases in manufacturing jobs, stemming from increased demand for manufacturing of equipment and materials needed for natural gas production. Significant job growth occurs within the tools and machinery manufacturing sector, which is expected to see 3,800-30,300 jobs by 2035, while the iron and steel manufacturing sector is projected to grow by an additional 2,300-9,600 jobs in 2035. Other key manufacturing sectors with strong growth include petroleum/petrochemical manufacturing, which is anticipated to see net job gains of 530-3,100 jobs in 2035, and the chemicals/rubber/glass manufacturing sector, which is expected to see 600-9,500 net job gains in 2035, relative to the Zero Exports Case.²⁶

Domestic Need for the LNG to be Exported

The primary focus of the DOE/FE's public interest analysis is on the domestic need for the LNG proposed to be exported. This domestic need can be analyzed by comparing the domestic natural gas supply against natural gas demand.

²⁶ Ibid

Domestic natural gas resources are abundant, environmentally friendly, and affordable, and are sufficient to meet both the domestic consumption demand and any expected level of LNG exports (including all those proposed by Texas LNG) in the long-term. Recent technological developments in the natural gas industry have led to significant increases in domestically-produced natural gas, especially with regard to non-conventional production of gas from onshore shale formations.

DOE/FE has repeatedly found that there are adequate natural gas resources to meet demand associated with LNG exports. In its LNG export orders, DOE/FE has focused on three measures of supply: estimates of future production, measures of proved reserves (volumes that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions), and technically recoverable resources or “TRR” (amounts producible using current recovery technology without reference to economic profitability).

The latest EIA projections show U.S. natural gas production continuing the phenomenal increase of recent years. The reference case in AEO 2014 projects that total U.S. dry gas production will increase from 22.55 Tcf in 2011 to 37.54 Tcf in 2040, growing by an average amount of 1.6% per year over that period.²⁷ More recent EIA data shows total dry gas production of over 24.3 Tcf in 2013 and over 25 Tcf in 2014.²⁸ EIA also projects increased gas consumption, with growth at 0.8% — just half the rate of growth in supply — to reach 31.63 Tcf in 2040.²⁹ The growing surplus of gas production over consumption sets the stage for the U.S. to become a net export of gas before 2020.³⁰

²⁷U.S. Energy Information Administration, Annual Energy Outlook 2014 (“AEO 2014”), at A-27 & Table A13 (April 2014), available at: [http://www.eia.gov/forecasts/aeo/pdf/0383\(2014\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2014).pdf)

²⁸Year-end production data for 2014 is not yet available; but, through ten months, 2014 production was over 0.98 Tcf more than in 2013. EIA, Natural Gas Monthly (Dec. 2014) at Table 1, available at: http://www.eia.gov/naturalgas/monthly/pdf/table_01.pdf. The total dry gas production for the first ten months of 2014 was approximately 21.95 Tcf, with monthly production of over 2 Tcf in each month except one and a high of about 2.24 in October. *Id.*

²⁹AEO 2014, at A-27 & Table A13.

³⁰*Id.*, at MT-22 and Figure MT-42 (“With production growing faster than use, the U.S. becomes a net exporter of natural gas”).

As DOE/FE itself recently explained, EIA 's recognition of the availability of excess supply has been growing in the recent years since DOE/FE began considering LNG exports.³¹ This growth is illustrated by a comparison of EIA's estimates for 2035 provided in AEO 2011 compared to AEO 2014. AEO 2011 estimated 2035 total consumption of 72.7 Bcf/d compared to total dry gas production of 72.1 Bcf/d, while AEO 2014 projects consumption of 83.4 Bcf/d compared to production of 98.9 Bcf/d.³² With this higher expected production and consumption, the 2035 projected market price in the Reference Case declined (in constant 2012 \$) from \$7.31/ MMBtu in the AEO 2011 to \$6.92/MMBtu in the AEO 2014.³³ As DOE/FE concluded, "the implication of the latest EIA projections is that a greater quantity of natural gas is projected to be available at a lower cost than estimated just three years ago."³⁴ In other words, the conclusion that projected gas production is ample to supply both domestic needs and LNG exports has only strengthened over time.

A comparison of the current data with earlier EIA projections is even more revealing of the incredible growth in domestic gas production in recent years. For instance, EIA's AEO 2006 showed total dry gas production for 2004 of 18.46 Tcf, which was a decrease from 19.04 in 2003.³⁵ Looking to the future, EIA at that time projected total dry gas production to be 18.58 Tcf in 2010, 20.36 Tcf in 2015, 21.44 Tcf in 2020, and 20.83 Tcf in 2030.³⁶ The general expectation at that time of flat or falling domestic gas production, together with expected increases in gas demand, lead to a wave of U.S. LNG *import* project proposals. Since the AEO 2006, of course, the actual production levels have already far exceeded these long-term projections, exceeding 25 Tcf in 2014 — thereby, setting the stage for LNG exports.

The increase in U.S. gas reserves in recent years has been even more dramatic than the growth in production. As DOE/FE has recognized, proved dry natural gas reserves increased from 2000 to

³¹See *Oregon LNG*, Order No. 3465 at 84-88.

³²*Id.* at 87 & Table 4 and 104.

³³*Id.* at 104.

³⁴*Id.*

³⁵EIA, AEO 2006, at 155 and Table A13, available at: <http://www.eia.gov/oiaf/archive/aeo06/>

³⁶*Id.*

2010 by 72% (from 177.4 Tcf to about 304.6 Tcf) while production has increased by just 16%, demonstrating the growing available supply of natural gas.³⁷ Even more recently, EIA calculated that proved dry natural gas reserves increased further to 338 Tcf as of year-end 2013, an all-time record high.³⁸

EIA's estimates of TRR have fluctuated in recent years, from below 2,000 Tcf in AEO 2010 to more than 2,500 Tcf in AEO 2011 to 2,266 Tcf in AEO 2014.³⁹ Other well-respected estimates of TRR are slightly higher. For instance, a 2013 study of the world's shale gas resources prepared by Advanced Resources International and released by EIA calculated TRR for the U.S. of 2,431 Tcf.⁴⁰ Similarly, a study by the Potential Gas Committee of the Colorado School of Mines estimated that the recoverable natural gas resource in North America is 2,384 Tcf.⁴¹

DOE has historically determined whether there is a domestic need for the gas proposed for export by comparing the total volume of natural gas reserves expected to be available to produce with the expected gas demands during the proposed period of exports.⁴² Thus, in its recent export authorization for Oregon LNG, DOE/FE concluded:

EAI's recent [AEO 2014] estimate of TRR equates to nearly 90 years of natural gas supply at the 2013 domestic consumption level of 26.04 Tcf. Moreover, given the supply projections under each of the above measures, we find that granting the requested authorization is unlikely to affect adversely the availability of natural gas supplies to

³⁷*Oregon LNG*, Order No. 3465 at 104 & Table 5; *Jordan Cove*, Order No. 3413 at 108-109. DOE/FE reached the same conclusion, with slightly different figures based on a different data source (increase of 88% in proved reserves and of 23% in production) in *Cameron LNG*, Order No. 3391 at 97

³⁸EIA, "US Crude Oil and Natural Gas Proved Reserves, 2013" (Dec. 2014) at 16 & Table 17, available at: <http://www.eia.gov/naturalgas/crudeoilreserves/pdf/uscrudeoil.pdf>

³⁹See U.S. Energy Information Administration, *Assumptions to the Annual Energy Outlook 2014* (June 2014), Table 9.2. "Technically recoverable U.S. natural gas resources as of January 1, 2012, at 114, available at: [http://www.eia.gov/forecasts/aeo/assumptions/pdf/0554\(2014\).pdf](http://www.eia.gov/forecasts/aeo/assumptions/pdf/0554(2014).pdf)

⁴⁰See "Technically Recoverable Shale Oil and Shale Gas Resources: An Assessment of 137 Shale Formations in 41 Countries Outside the United States," released by EIA on June 10, 2013, Table 2, available at: <http://www.eia.gov/analysis/studies/worldshalegas/>

⁴¹Potential Gas Committee press release, April 9, 2013, and summary of the report, available at <http://potentialgas.org/> and <http://potentialgas.org/download/pgc-press-release-april-2013-slides.pdf>

⁴²*E.g.*, *Yukon Pacific Corp.*, ERA Docket No. 87-68-LNG, Order No. 350 (Nov. 16, 1989); *Phillips Alaska Natural Gas Cor. And Marathon Oil Co.*, DOE/FE Order No. 1473 (April 2, 1999); *Conoco Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, FE07-02-LNG, Order No. 2500 at 43 (June 3, 2008).

domestic consumers such as would negate the net economic benefits to the United States.⁴³

This conclusion applies equally here.

Importantly, increased demand for gas to be exported as LNG will stimulate additional natural gas production. As previously noted, the recent EIA study of the effect of increased LNG exports of 12-20 Bcf/d concluded that increased natural gas production will satisfy 61% to 84% of the increase in natural gas demand from LNG exports.⁴⁴ ICF International similarly concluded that 79-88% of LNG export volumes will be offset by increasing domestic natural gas production.⁴⁵ This increased gas production will have the added benefit of increased associated natural gas liquids (“NGL”). ICF estimated that LNG exports will increase NGL volumes by 2035 by 138,000 barrels per day (for a low LNG export case of 4 Bcf/d) to 550,000 barrels per day (in its high, 16 Bcf/d export case).⁴⁶ The increased gas and NGL production are important public benefits of LNG exports.

In light of the ample supply of domestic natural gas, granting the authorization requested by Texas LNG to export LNG to non-FTA countries is unlikely to affect the availability of natural gas to domestic consumers. To the contrary, as explained in the NERA study commissioned by DOE/FE itself and NERA’s recent update of that study, and recognized in an unbroken string of DOE/FE order authorizing exports, LNG exports will provide a net economic benefit to the United States regardless of the amount of LNG that is exported from the United States.

Limited Price Impact on US Natural Gas Prices

One important issue in the debate about expediting the U.S. Department of Energy’s LNG permitting process is the impact of exports on domestic natural gas prices. U.S. shale gas production, which has risen by over 50% over the 2007-2013 period, has contributed to the fall in natural gas

⁴³ *Oregon LNG*, Order No. 3465 at 106.

⁴⁴ EIA, “Effect of Increased Levels of LNG Exports,” *supra*. note 30.

⁴⁵ The ICF study is cited above at note 25. *See also* the ICF International presentation, summarizing the study, provided to the U.S. House of Representatives LNG Working Group at page 5 (May 15, 2013), *available at*: <http://www.api.org/~media/Files/Policy/LNG-Exports/ICF-Key-Findings-for-API.pdf>

⁴⁶ *Id.*

prices from a high of \$11/million cubic feet in 2008 to the current well-head price of about \$2.50-\$3.00/MMBtu. While a recent Black & Veatch survey, “2013 Strategic Directions in the North American Natural Gas Industry” concluded that natural gas prices would increase to a range between \$4.50 to \$7.49 MMBtu (one million British thermal units) in 2020, most analysts forecast that prices will remain below \$5.00 MMBtu over the next 5 to 10 years.⁴⁷

A number of analyses conclude that LNG exports in the range 6 to 12 Bcf/d would not have a significant impact on domestic prices. For example, the Peterson Institute for International Economics report “Liquefied Natural Gas Exports: An opportunity for America” notes that recent economic analyses conclude that LNG exports would raise domestic natural gas prices by only 3.5% to 16.0%. In addition, the Bentek Energy report projections show U.S. natural gas prices will remain in the range of \$ 4.18 MMBtu through 2018.

According to ICF, LNG exports are projected to have moderate impacts on domestic U.S. natural gas prices of about \$0.32 to \$1.02 per million British Thermal Units (MMBtu) on average between 2016 and 2035. This results in 2016-2035 average Henry Hub natural gas price estimates of between \$5.03 and \$5.73/MMBtu, depending on LNG export case.⁴⁸

⁴⁷American Council for Capital Formation, “LNG Exports: How Much Will They Impact U.S. Natural Gas Prices?”, Margo Thorning, PH.D., November 2013.

⁴⁸ICF, “Status Report and Preliminary Results: The Economic Impacts of U.S. LNG Exports”, February 22, 2013.

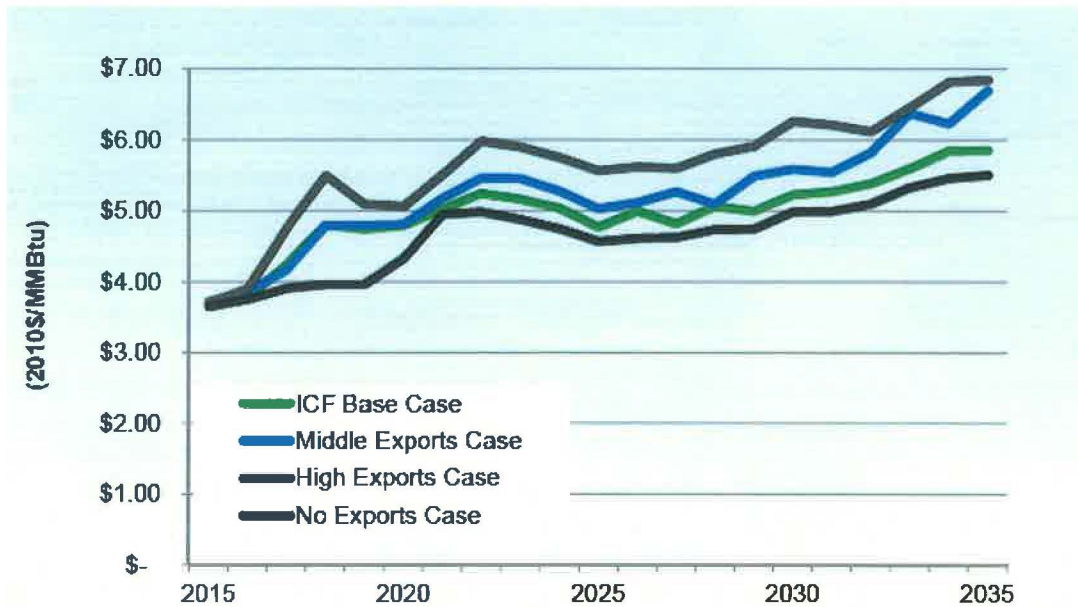


Figure 4: Henry Hub Prices (2010\$/MMBtu) (Source: ICF)

The following table shows wholesale natural gas price changes relative to zero exports case:

Case	Natural Gas at Henry Hub (2016-2035 Avg)
ICF Base Case	
Avg Price Increase (\$/MMBtu)	\$0.32
Avg Price Increase/Bcfd (\$/MMBtu)	\$0.10
Middle Exports Case	
Avg Price Increase (\$/MMBtu)	\$0.59
Avg Price Increase/Bcfd (\$/MMBtu)	\$0.11
High Exports Case	
Avg Price Increase (\$/MMBtu)	\$1.02
Avg Price Increase/Bcfd (\$/MMBtu)	\$0.10

Figure 5: Wholesale Natural Gas Price Changes Relative to Zero Exports Case (Source: ICF)

Given Texas LNG’s proposed limited export capacity (over time approximately 4 MTA or 0.55 Bcf/d), there will be a minor impact on overall US natural gas supply and pricing.

Higher Government Revenue

The ICF International analysis also shows that LNG exports would increase government revenues at the federal, state, and local levels due to taxes on GDP gains associated with additional economic activity, as well as additional royalty payments to the government for natural gas production taking place on government lands. State and local taxes (which include severance taxes associated

with natural gas production) comprise the largest share of government revenues, with federal taxes making up a smaller portion. In sum, the ICF report concludes, government revenues reach between \$6.4-\$9.3 billion in the ICF Base Case, \$14.3-\$20.8 billion in the Middle Exports Case, and \$27.9-\$40.4 billion annually in the High Exports Case by 2035.

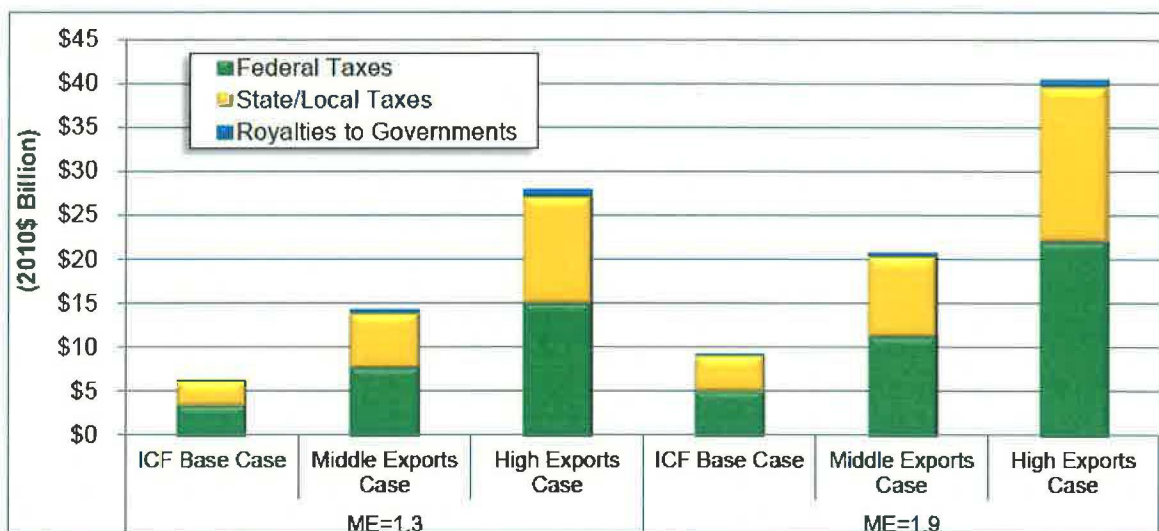


Figure 6: 2035 Government Revenues by Source (Source: ICF)

US LNG Exporters to Gain International Market Share

An international comparison of project costs and transportation costs differentials reveals that U.S. LNG exports (if they were not limited by government regulations) would likely fall within the range of 4 to 16 Bcf/d. This indicates that U.S. LNG exports would have 12% to 28% market share of new LNG contract volumes in 2025 and market share of 8% to 25% in 2035.⁴⁹

Positive Impact on Small & Medium Enterprises (SMEs)⁵⁰

To put the potential economic effects of increased LNG exports from the U.S. in perspective, it is useful to look at the impact of increased energy production on U.S. employment. As noted in a report, “The Benefits of Natural Gas Production and Exports for U.S. Small Businesses,” by the Small

⁴⁹ICF International, “U.S. LNG Exports: Impacts on Energy Markets and the Economy”, May 15, 2013.

⁵⁰Small Business & Entrepreneurship Council (SBEC), “The Benefits of Natural Gas Production and Exports for U.S. Small Businesses,” May 2013, page 2-3 <http://www.sbecouncil.org/wp-content/uploads/2013/05/BenefitsofNatGasSBECouncil.pdf>

Business & Entrepreneurial Council, while overall U.S. jobs in employer firms declined by 3.7 percent from 2005 to 2010, jobs grew by 27.6 percent in the oil and gas extraction sector during the same time period.

During the same period, employment grew by 15.1 percent in the drilling oil and gas wells sector; by 38.5 percent in the support sector for oil and gas operations; by 47 percent in the oil and gas pipeline and related structures construction sector; and by 62 percent in the oil and gas field machinery and equipment manufacturing sector. As the SBEC report notes, expanded energy production over the 2005-2010 period has been a boon to small and midsize enterprises.

Other Positive Impacts of US LNG Exports⁵¹

NGLs: By 2035, ICF estimates incremental liquids volume increase between 138,000 barrels per day (bpd) and 555,000 bpd, attributable to LNG exports (relative to no exports). For context, in 2012, the U.S. total liquids production equals 2.4 million barrels per day.

Petrochemicals: The incremental volume increase in ethane (feedstocks for ethylene production) will increase ethylene production by between 2,100 tonnes/day and 8,600 tonnes/day by 2035.4 For reference, a world-scale ethylene plant would have a capacity of 2,740 tonnes/day, meaning LNG exports and the associated increase in ethane production would support roughly one to three additional world-scale ethylene plants.

Methanol and Ammonia: LNG exports have a negligible effect on methanol and ammonia production, according to ICF's modeling assumptions wherein the price of these products are high enough to keep new and existing plants profitable even at the higher feedstock prices resulting from LNG exports.

⁵¹*ibid.*

State-Level Economic Impacts of U.S. LNG Exports⁵²

Similar to the ICF national-level study, which found overwhelmingly positive economic and employment impacts associated with LNG exports, an ICF study on the state-level concludes that LNG exports have a net positive impact, or negligible net impact, across all states.

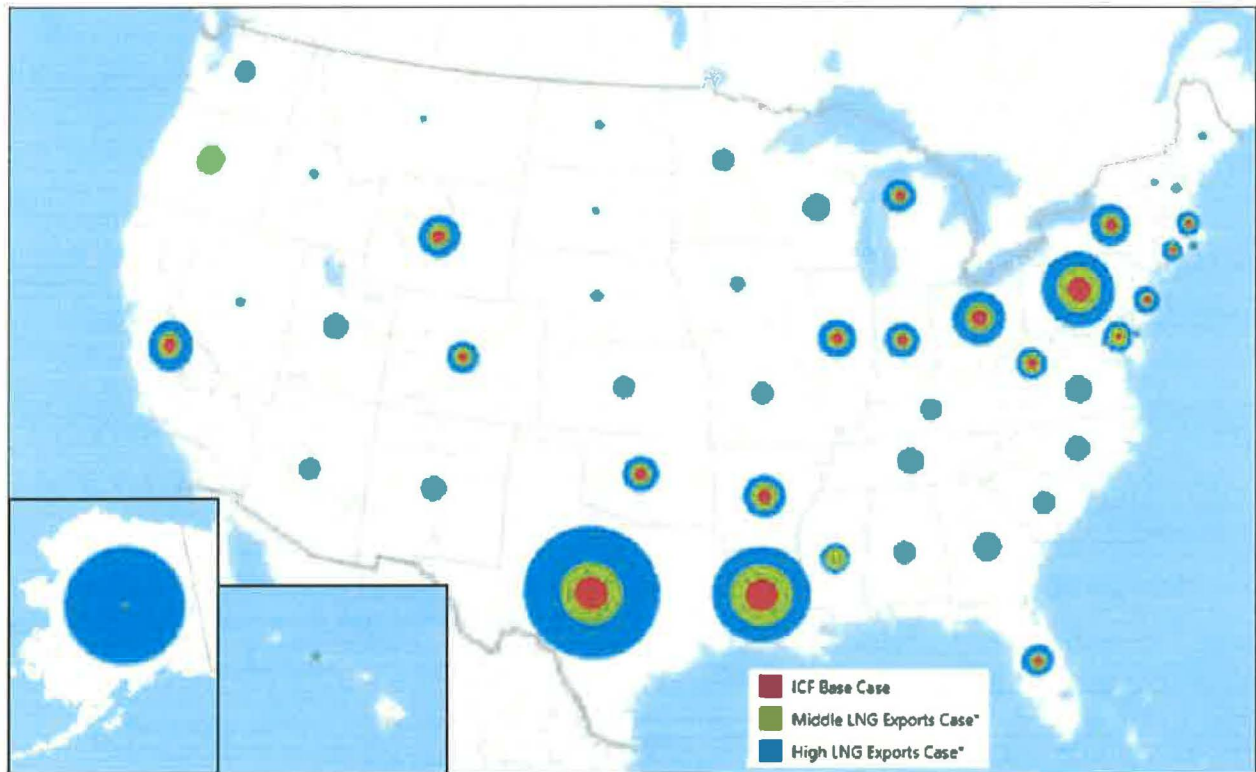


Figure 7: Map of 2035 Relative Income Impacts from LNG Exports (By State Income) (Source ICF)⁵³

In particular, states such as Texas (location of Texas LNG Project) with natural gas production, liquefaction plants, and petrochemical processing are expected to see significant employment gains with LNG exports.

Texas LNG's Positive Impact on Public Interest

Employment Generation

Texas LNG estimates that at its peak, more than 600 onsite engineering and construction jobs will be created during the design and construction period for the Project. Furthermore, hundreds of

⁵²ICF International, "U.S. LNG Exports: State-Level Impacts on Energy Markets and the Economy", November 13, 2013.

⁵³The circle sizes represent the relative income impact of each state for each LNG export case.

offsite jobs will be created to support the design, fabrication and construction of these facilities. The ongoing management and operation of the Project is expected to create approximately 80 new permanent positions. A large number of new American jobs will be indirectly created by production of natural gas required to feed the Project and by the associated maritime operations resulting from the Project.

Key Conclusions

The preponderance of the economic analyses of the impact exports of LNG from the U.S. show positive overall benefits in terms of jobs, investment and GDP growth. In addition, the impact on U.S. domestic natural gas prices rises will be relatively small, thus allowing U.S. customers to maintain a strong competitive advantage over its trading partners.

In addition, Texas LNG's Project is expected to generate numerous benefits to the South Texas economy.

7. ENVIRONMENTAL IMPACT

Texas LNG's intended LNG exports will require the siting, construction, and operation of the potential Brownsville, Texas facility, subject to environmental review and authorization by FERC. Texas LNG's off-site fabrication plan for major Project components will minimize the environmental impact as opposed to the increased footprint of constructing on-site liquefaction facilities. In addition to the authorization from DOE/FE sought in this Application and the authorizations from FERC, Texas LNG will seek the necessary permits from and consultations with other federal, state, and local agencies as required.

Exporting natural gas will benefit the United States internationally because it will support the use of more environmentally-friendly natural gas for the generation of electricity as opposed to diesel or heavy fuel oil used in other foreign countries. The Environmental Protection Agency has estimated that 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 1% as much sulfur oxides.⁵⁴ Energy Secretary Moniz reportedly has recognized how the natural gas boom has helped reduce America's greenhouse gas ("GHG") emissions, noting that about half of the progress that has been made toward reducing greenhouse gases to 17% below 2005 levels by 2020 has been due to substitution of gas for coal in electric generation.⁵⁵ LNG exports from the U.S. may similarly substitute for coal, or fuel oil, usage overseas, thereby sharing the environmental benefits of natural gas with other nations in the quest to reduce global greenhouse gas emissions.

To better inform the public about the environmental effects of increased LNG exports, DOE prepared a study of the Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States, which compared the GHG emissions from power generation in Europe and Asia using exported U.S. LNG with the GHG emissions from power generated using local

⁵⁴See <http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html>

⁵⁵See "Energy Secretary: Natural gas helps battle climate change – for now," by Ben Geman, *The Hill* (08/01/13), available at: <http://thehill.com/blogs/e2-wire/e2-wire/315009-energy-secretary-natural-gas-helps-battle-climate-change-for-now> [](quoting Secretary Moniz's comments to reporters).

hydrocarbon resources.⁵⁶ That study highlighted the “indeterminate” differences between modeled outcomes due to “underlying uncertainty in the modeling data.”⁵⁷ DOE/FE has held that “[t]he conclusions of the [2014 GHG Study], 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.”⁵⁸

⁵⁶Dep’t of Energy, DOE/NETL-2014/1649, *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States* (May 14 2014), available at: <http://www.energy.gov/sites/prod/files/2014/05/fl6/Life%20Cycle%20GHG%20Perspective%20Report.pdf> (hereinafter, the “2014 GHG Study”).

⁵⁷See 2014 GHG Study at 18.

⁵⁸*Cameron LNG, LLC*, DOE/FE Order No. 3391-A at 83; *Freeport LNG Expansion, L.P.*, DOE/FE Order No. 3357-B at 94.

8. CONCLUSION

For the reasons set forth above, Texas LNG respectfully requests that the DOE issue an order granting Texas LNG authorization to export for a twenty-five (25) year period on its own behalf and as an agent for others, up to 4 MTA (million tonnes per annum) of LNG, which is equivalent to approximately 550 MMcf/d or 0.55 Bcf/d or approximately 200 Trillion Btu/year, 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.

Dated: April 3, 2015

Respectfully submitted

William Garner
Greenberg Traurig, LLP
1000 Louisiana Street
Suite 1700
Houston, TX 77002
Tel: +1 713 374 3500
Fax: +1 713 374 3505
garnerw@gtlaw.com

9. APPENDICES

The following appendices are included with this application:

Exhibit A: Option on Lease Contract Navigation District of Brownsville

Exhibit B: Opinion of Counsel

Exhibit C: Verification

Exhibit A:
Option on Lease Contract Navigation District of Brownsville

Second Amendment to Option to Lease

This Second Amendment to Option to Lease (hereinafter "Amendment") dated March 4, 2015 (hereinafter "Effective Date"), is entered into between the **Brownsville Navigation District of Cameron County, Texas**, a political subdivision of the State of Texas (hereinafter "Optionor") and **Texas LNG, LLC** (hereinafter "Optionee"). Optionor and Optionee may be referred to herein, collectively as "Parties" and individually as a "Party".

Recitals

WHEREAS, Optionee and Optionor entered into that certain Option to Lease Agreement (hereinafter "Agreement") effective December 20, 2013 whereby Optionee acquired from Optionor the option to lease the premises, described in the attached **Exhibit A** (hereinafter "Premises"), for the purpose of a liquid natural gas import/export facility, upon the terms and conditions included in said Agreement; and

WHEREAS, Optionee and Optionor entered into that certain First Amendment to Option to Lease effective April 20, 2014 whereby the Parties changed the location and the size of the optioned Premises by replacing the 51.21 acre optioned Premises on the South Side of the ship channel with a 111.5 acre tract on the north side of the ship channel, which is described in the attached **Exhibit B** (hereinafter "Amended Premises"); and

WHEREAS, the Parties wish to change the location and increase the size of the Amended Premises under the Agreement by approximately 513.5 acres. Said 625 acres, after the increase, are more particularly described in the attached **Exhibit C** (hereinafter "Increased Amended Premises"); and

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WHEREAS, the Optionee exercised its First Renewal Term under Section 3 of the Agreement extending the Term of the Agreement for one year from December 20, 2014 until December 19, 2015; and

WHEREAS, under the Agreement Optionee has the option to extend and renew the Term of the Agreement for a Second Renewal Term of one year which would begin on December 20, 2015 and expire on December 19, 2016; and

WHEREAS, the Parties wish to add a Third Renewal Term of one year to Section 3 of the Agreement which would begin on December 20, 2016 and expire on December 19, 2017.

WHEREAS, Optionee wishes to amend its address for purposes of Notices under Section 8 of the Agreement; and

WHEREAS, the Parties wish to update the Timeline for Planning and Development of Project and Use of Premises as attached to the Agreement as **Exhibit D**; and

WHEREAS, the Parties wish to provide for good faith negotiations for a grant of a pipeline/utility easement by Optionor to Optionee in the event Optionee exercises its Option.

Agreement

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which are acknowledged, the Parties agree as follows:

1. Optionee's address for purposes of Notices under the Agreement shall be 700 Louisiana Street, Suite 3950, Houston, Texas 77002.
2. The Parties hereby agree that the size of the Amended Premises is increased by approximately 513.5 acres. The size of the Amended Increased Premises under the Agreement is now approximately 625 acres and is more particularly described in **Exhibit C**.

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JMM

3. Optionee agrees to pay to Optionor, as consideration for an option to lease on the Amended Increased Premises,

(hereinafter "Amended Option Fee"). The Amended Option Fee shall be due and payable on December 20th of each year beginning on March 4, 2015 so long as the Option Agreement is in full force and effect.

4. Section 6 of the Agreement provides that in the event Optionee exercises its Option, the Parties shall enter into a lease for the Premises on Optionor's standard lease form, with commercially reasonable modifications appropriate to the development of a liquid natural gas import/export facility as agreed to by the Parties. In the event Optionee exercises its Option, Optionee and Optionor further agree to negotiate in good faith for the granting by Optionor to Optionee of an easement for a pipeline and utilities across Optionor's property as may be required to operate a liquid natural gas import/export facility. Optionor agrees to not unreasonably withhold said easement from Optionee.

5. Section 7 of the Agreement provides that Optionee may only exercise its renewal option(s) under Section 3 of the Agreement if Optionee adheres to the Timeline for the Planning and Development of its Project and Use of the Premises as described in **Exhibit D** of the Agreement. Optionor and Optionee agree that said Timeline for the Planning and Development of its Project and Use of the Premises is hereby amended and is attached hereto fully as **Exhibit D** and is incorporated by reference.

6. The Parties agree to amend Section 3 of the Agreement to add an option to extend and renew the Term of the Agreement for a Third Renewal Term that would begin on December 20, 2016 and expire on December 19, 2017.

7. Optionor or Optionee shall within (5) days of the execution of this Amendment, execute and acknowledge a memorandum of amendment to lease option in the form attached hereto as **Exhibit E** (hereinafter "Memorandum of Option") which may, at Optionee's sole option, be recorded in the Real Property Records of Cameron County, Texas. Nothing in such Memorandum of Option shall modify or amend any provision of the Agreement or this Amendment. Upon the termination of the Agreement and at the request of either Party hereto, Optionor and Optionee shall enter into and record a memorandum evidencing such termination in a form reasonably satisfactory to each of the Parties.

8. The Effective Date of this Amendment shall be March 4, 2015.

9. All other terms and conditions of the Agreement remain in full force and effect. To the extent the terms of the Option Agreement and the First Amendment to Option to Lease conflict with the terms of this Second Amendment to Option to Lease, the terms of this Second Amendment to Option to Lease shall control

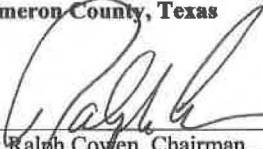
IN WITNESS WHEREOF, the Parties have executed this Amendment to Option to Lease as of the Effective Date of this Second Amendment to Option to Lease.

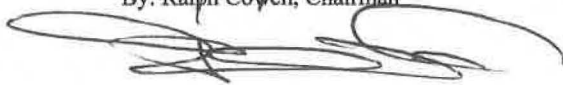
Signature Page to Follow...

jm

OPTIONOR:

**Brownsville Navigation District of
Cameron County, Texas**


By: Ralph Cowen, Chairman


Attested to by Secretary

OPTIONEE:

Texas LNG, LLC

By: Langtry N. Meyer

Name: LANGTRY NELSON MEYER

Its: COO



Exhibit A

Legal Description of the Initial Premises



EXHIBIT "A"
METES AND BOUNDS DESCRIPTION
51.21 ACRE TRACT

December 19, 2013

BEING 51.21 ACRES of land, comprised of a portion of the Gatewood Newberry Patent, Tract 318, Abstract 269, G.L.O. File S.F. 12924, Share 2, and 3, in San Martin Grant, Abstract 6, and a portion of Patent No. 68, Abstract 264, Survey 665 from the State of Texas to Brownsville Navigation District in Cameron County, Texas, said 51.21 Acre tract being more fully described as follows:

COMMENCING at U.S.E.D Station 60+108.89 on the centerline of the Brownsville Ship Channel having coordinate values: X=2,387,981.48 and Y=116,257.99; thence South 32 deg. 21 min. 25 sec. East, 250.01 feet to a point on the South Right-of-Way line of the Brownsville Ship Channel's perpetual Right-of-Way Easement; thence along the South Right-of-way line of the Brownsville Ship Channel, North 57 deg. 38 min. 35 sec. East, 16,452.94 feet; thence along the East boundary line of the Disposal Area No. 5 2,198.93 Acres, South, 32 deg. 20 min. 02 sec. East, 350.00 feet to a point for the Northwest corner of a certain 295.00 Acre Tract; thence along a line parallel to and 600.0 feet from the centerline of the Brownsville Ship Channel, North 57 deg. 38 min. 35 sec. East, at 3,161.95 a point for the Northeast corner of said 295.00 Acre Tract, a total distance of 6,776.31 feet for the Northwest corner and PLACE OF BEGINNING of this tract;

THENCE continuing along said line parallel to and 600.0 feet from the centerline of the Brownsville Ship Channel, North 57 deg. 38 min. 35 sec. East, 1,500.00 feet to a point for the Northeast corner of this tract;

THENCE leaving the South Right-of-way line of line of the Brownsville Ship Channel, South 35 deg. 49 min. 16 sec. East, at 721.36 feet a point at the Northwest corner of Placement Area No. 4B, a total distance of 1,014.33 feet to a point at the Southwest corner of the Placement Area No. 4B, for the Southeast corner of this tract;

THENCE South 28 deg. 26 min. 42 sec. West, 1,788.54 feet to a point for the Southwest corner of this tract;

THENCE North 32 deg. 21 min. 25 sec. West, 1,884.98 feet to the PLACE OF BEGINNING, containing 51.21 Acres of land, more or less.

This description must be verified by a field survey.

SURVEYOR'S NOTE: All bearings and distances are based on the Centerline of the Brownsville Ship Channel, Meridian (N 69 deg. 14 min. E) indicated per South Right-of-Way line of State Highway No. 48 (FM 1792) Texas Highway Department of Transportation Right-of-Way map.



Exhibit B

Legal Description of Amended Premises



EXHIBIT "A"

TEXAS LNG, LLC

METES AND BOUNDS DESCRIPTION

111.5 ACRE TRACT

March 26, 2014

BEING 111.5 ACRES of land out of Share 3, San Martin Grant, Cameron County, Texas, said 111.5 Acre Tract being more particularly described as follows:

BEGINNING at the intersection point of the U.S.E.D. Station 40+626.52 and the North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, said point being the Southeast corner of the 400.0 Ft. Gayman Channel Easement, thence along the North 6+00 original reference line South 57 deg. 38 min. 35 sec. West, 400.0 feet to a point for the Southeast corner and **PLACE OF BEGINNING** of this tract;

THENCE along the North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, South 57 deg. 38 min. 35 sec. West, 2,404.80 feet to a point on the Southeast corner of the approximately location cat corridor for the Southwest corner of this tract;

THENCE along the East line of the approximately location cat corridor, North 55 deg. 54 min. 55 sec. West, 2,225.49 feet to a point on the South Right-of-Way line of said State Highway No. 48, for a corner of this tract;

THENCE along the South Right-of-Way line of said State Highway No. 48, North 57 deg. 38 min. 35 sec. East, 2,404.80 feet to a point on the Northwest corner of said Gayman Channel Easement, for the Northeast corner of this tract;

THENCE along the west line of said 400.00 Ft. wide Gayman Channel Easement, South 55 deg. 54 min. 55 sec. East, 2,225.49 feet to the **PLACE OF BEGINNING**, containing 111.5 Acres of land, more or less.

This description is not based on an on-the-ground survey.

(2)

Exhibit C

Legal Description of Increased Amended Premises

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EXHIBIT "A"
TEXAS LNG BROWNSVILLE, LLC
METES AND BOUNDS DESCRIPTION
625.00 ACRE TRACT

January 14, 2015

BEING a 625.00 Acre Tract of land out of Santa Isabel Grant, Cameron County, Texas, said 625.00 Acre Tract being more fully described as follows;

COMMENCING at the intersection point of U.S.E.D. Station 30+552.57 and the North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, said point being the Southwest corner of a certain 500.00 Acre Tract, thence along the North 6+00 Reference line from the original centerline of the Brownsville Ship Channel, North 62 deg. 25 min. 27 sec. East, 5,402.16 feet to a point for the Southwest corner and **PLACE OF BEGINNING** of this tract;

THENCE along the East line of a certain 500.00 Acre Tract, North 31 deg. 28 min. 34 sec. West, 1,582.41 feet to a point for a corner of this tract;

THENCE continuing along the East line of said 500.00 Acre Tract, North 60 deg. 24 min. 32 sec. West, 4,510.94 feet to a point on the East Right-of-Way line of State Highway No.48 (recorded in volume 11459 page 239, Official Deed Records) for the Northwest corner of this tract;

THENCE along said East Right-of-Way line of State Highway No.48 North 22 deg. 08 min. 24 sec. East, 495.52 feet to a point for a corner of this tract;

THENCE continuing along the East Right-of-Way line of said State Highway No.48, North 18 deg. 59 min. 26 sec. East, 2,300 feet to a point for a corner of this tract;

THENCE continuing along the East Right-of-Way line of said State Highway No.48, North 15 deg. 50 min. 29 sec. East, 1001.44 feet to a point for a corner of this tract;

THENCE continuing along the East Right-of-Way line of said State Highway No. 48, North 18 deg. 59 min. 26 sec. East, 297.95 feet to a point for the Northeast corner of this tract;

THENCE leaving the East Right-of-Way line of said State Highway No.48, South 60 deg. 24 min. 32 sec. East, 4,415.86 feet to a point for a corner of this tract;

THENCE South 31 deg. 28 min. 34 sec. East, 4,497.79 feet to a point on the North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, for the Southeast corner of this tract;

THENCE along said North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, South 61 deg. 08 min. 00 sec. West, 230.02 feet to a point for a corner of this tract;

THENCE along said North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, South 62 deg. 25 min. 27 sec. West, 2,872.28 feet to the **PLACE OF BEGINNING**, containing 625.00 Acres of land, more or less.

This description is not based on an on-the-ground survey.

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Exhibit D

Updated Timeline for Planning and Development of Project and Use of Premises

2015

1. Optionee submit Pre-Filing request to the Federal Energy Regulatory Commission ("FERC").
2. FERC Office of Energy Projects ("OEP") Director issues a Notice of Pre-Filing Commencement.
3. Optionee conducts open houses to the community.
4. Optionee submits draft Resource Reports to the FERC.

2016

5. Optionee submits National Gas Act ("NGA") Section 3 application to the FERC.
6. FERC third-party consultant commences drafting of Environment Impact Statement ("EIS").

Handwritten initials: JLM

Exhibit E

MEMORANDUM OF SECOND AMENDMENT TO OPTION TO LEASE

THE STATE OF TEXAS §

§ KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF CAMERON §

This MEMORANDUM OF SECOND AMENDMENT TO OPTION TO LEASE (this "Memorandum of Option") is made and entered into effective as of the 20th day of December, 2014 by and between the **BROWNSVILLE NAVIGATION DISTRICT OF CAMERON COUNTY, TEXAS**, a navigation district organized, created and existing under and by virtue of the laws of the State of Texas, with its domicile in Brownsville, Cameron County, Texas, ("Optionor") and the **TEXAS LNG, LLC** ("Optionee").

Optionor and Optionee are parties to the Option to Lease dated as December 20, 2013 (said Option to Lease, as heretofore amended, the "Option Agreement"), covering certain real property situated in Cameron County, Texas. Pursuant to the terms of the Option Agreement, Optionor granted to Optionee an option to lease the Property, as more particularly described in the Option Agreement. The Option Agreement was extended pursuant to its terms on December 20, 2014. Optionor and Optionee agreed on April 20, 2014 to change the location and size of the optioned Premises under the Agreement by replacing the 51.21 acre tract with a 111.5 acre tract. On March 4, 2015, Optionor and Optionee agreed to change the location and increase the size of the premises covered under the Option Agreement from 111.5 acres to 625 acres. Said 625 acre tract is more particularly described on **Exhibit A** which is attached hereto and incorporated by reference.


NOW, THEREFORE, the Parties hereto have entered into this Memorandum of Second Amendment to Option to Lease to acknowledge and place as a matter of public record the aforementioned Option Agreement and its amendments. Nothing in this Memorandum of Option shall alter or amend any of the terms of the Option Agreement.

EXECUTED effective as of the date first above written.

D
TM

OPTIONOR:

**Brownsville Navigation District
Of Cameron County, Texas**

By: 
Ralph Cowen, Chairman

OPTIONEE:

Texas LNG, LLC

By: Langtry N. Meyer

Name: LANGTRY NELSON MEYER

Its: COO

STATE OF TEXAS §
 §
 §
COUNTY OF CAMERON §

This instrument was acknowledged before me on the 4th day of March, 2015, by Ralph Cowen, in his capacity as Chairman of the Board of Navigation and Canal Commissioners of the Brownsville Navigation District of Cameron County, Texas.




Notary Public in and for the State of Texas

STATE OF TEXAS §
 §
 §
COUNTY OF HARRIS §
~~CAMERON~~

This instrument was acknowledged before me on the 26th day of February, 2015, Langtry N. Meyer in his capacity as Chief Operating Officer of Texas LNG, LLC.




Notary Public in and for the State of Texas



Exhibit A



EXHIBIT "A"
TEXAS LNG BROWNSVILLE, LLC
METES AND BOUNDS DESCRIPTION
625.00 ACRE TRACT

January 14, 2015

BEING a 625.00 Acre Tract of land out of Santa Isabel Grant, Cameron County, Texas, said 625.00 Acre Tract being more fully described as follows;

COMMENCING at the intersection point of U.S.E.D. Station 30+552.57 and the North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, said point being the Southwest corner of a certain 500.00 Acre Tract, thence along the North 6+00 Reference line from the original centerline of the Brownsville Ship Channel, North 62 deg. 25 min. 27 sec. East, 5,402.16 feet to a point for the Southwest corner and **PLACE OF BEGINNING** of this tract;

THENCE along the East line of a certain 500.00 Acre Tract, North 31 deg. 28 min. 34 sec. West, 1,582.41 feet to a point for a corner of this tract;

THENCE continuing along the East line of said 500.00 Acre Tract, North 60 deg. 24 min. 32 sec. West, 4,510.94 feet to a point on the East Right-of-Way line of State Highway No.48 (recorded in volume 11459 page 239, Official Deed Records) for the Northwest corner of this tract;

THENCE along said East Right-of-Way line of State Highway No.48 North 22 deg. 08 min. 24 sec. East, 495.52 feet to a point for a corner of this tract;

THENCE continuing along the East Right-of-Way line of said State Highway No.48, North 18 deg. 59 min. 26 sec. East, 2,300 feet to a point for a corner of this tract;

THENCE continuing along the East Right-of-Way line of said State Highway No.48, North 15 deg. 50 min. 29 sec. East, 1001.44 feet to a point for a corner of this tract;

THENCE continuing along the East Right-of-Way line of said State Highway No. 48, North 18 deg. 59 min. 26 sec. East, 297.95 feet to a point for the Northeast corner of this tract;

THENCE leaving the East Right-of-Way line of said State Highway No.48, South 60 deg. 24 min. 32 sec. East, 4,415.86 feet to a point for a corner of this tract;

THENCE South 31 deg. 28 min. 34 sec. East, 4,497.79 feet to a point on the North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, for the Southeast corner of this tract;

THENCE along said North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, South 61 deg. 08 min. 00 sec. West, 230.02 feet to a point for a corner of this tract;

THENCE along said North 6+00 Reference Line from the original centerline of the Brownsville Ship Channel, South 62 deg. 25 min. 27 sec. West, 2,872.28 feet to the **PLACE OF BEGINNING**, containing 625.00 Acres of land, more or less.

This description is not based on an on-the-ground survey.

②

Exhibit B:
Opinion of Counsel

William S. Garner, Jr.
Tel 713.374.3549
Fax 713-754-6648
garnerw@gtlaw.com

April 3, 2015

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

**RE: Texas LNG, LLC, Docket No. 15-____-LNG
Application for Long-Term Authorization to Export Liquefied Natural Gas**

Dear Mr. Anderson

This opinion of counsel is provided in accordance with the requirements of Section 590.202(c) of the US Department of Energy's regulations, 10 CFR 590.202(c) (2012). I have examined the organizational and governance documents of Texas Brownsville LNG LLC, a Delaware limited liability company ("Texas LNG"), and other documents and authorities as necessary for purposes of this opinion. On the basis of the foregoing, it is my opinion that the proposed long-term, multi-contract export of liquefied natural gas by Texas LNG, as described in the above-referenced application, is within the limited liability company powers of Texas LNG.

Respectfully submitted



William S. Garner, Jr.

ALBANY
AMSTERDAM
ATLANTA
AUSTIN
BOSTON
CHICAGO
DALLAS
DELAWARE
DENVER
FORT LAUDERDALE
HOUSTON
LAS VEGAS
LONDON*
LOS ANGELES
MEXICO CITY*
MIAMI
MILAN*
NEW JERSEY
NEW YORK
ORANGE COUNTY
ORLANDO
PALM BEACH COUNTY
PHILADELPHIA
PHOENIX
ROME*
SACRAMENTO
SAN FRANCISCO
SEOUL*

Exhibit C:
Verification

VERIFICATION


I, Vivek Chandra, being sworn, do hereby affirm that I am a duly authorized representative of Texas Brownsville LNG LLC and that I am familiar with the contents of this application; and that the matters set forth therein are true and correct to the best of my knowledge, information and belief.


Vivek Chandra

DISTRICT OF COLUMBIA §

Signed and sworn to before me on this 2nd day of April, 2015, by Vivek Chandra.

(Seal) _____


Notary Public, District of Columbia
Commission Expires: October 14, 2016

DANA LYNN OLDS
NOTARY PUBLIC DISTRICT OF COLUMBIA
My Commission Expires October 14, 2016

