

04/20/2015

April 20, 2015

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

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Re: In the Matter of Sabine Pass Liquefaction, LLC
FE Docket No. 15-63-LNG
Application for Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations

Dear Mr. Anderson:

Enclosed for filing on behalf of Sabine Pass Liquefaction, LLC ("SPL"), please find SPL's application for long-term, multi-contract authorization to engage in exports of domestically-produced liquefied natural gas ("LNG") in an amount up to the equivalent of approximately 203 billion standard cubic feet per year of natural gas. SPL seeks authorization to export LNG to any nation with which the United States does not now or in the future have a free trade agreement requiring the national treatment for trade in natural gas that has, or in the future develops, the capacity to import LNG and with which trade is not prohibited by U.S. law or policy. SPL seeks authorization to export additional volumes of LNG from the Sabine Pass Liquefaction Project (Trains 1 through 4) for a 20-year term commencing on the date of first commercial export.¹

Should you have any questions, please contact the undersigned at (212) 318-3009.

Respectfully submitted,

/s/ Lisa M. Tonery
Lisa M. Tonery
Attorney for
Sabine Pass Liquefaction, LLC

Enclosures

Norton Rose Fulbright US LLP is a limited liability partnership registered under the laws of Texas.

¹ A check in the amount of \$50.00 is being provided as the filing fee stipulated by 10 C.F.R. § 590.207 (2015).

UNITED STATES OF AMERICA DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY

In The Matter Of:)	
SABINE PASS LIQUEFACTION, LLC)	FE Docket No. 15- 63 - LNG

APPLICATION OF SABINE PASS LIQUEFACTION, LLC FOR LONG-TERM AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS TO NON-FREE TRADE AGREEMENT NATIONS

Pursuant to Section 3 of the Natural Gas Act ("NGA")¹ and Part 590 of the Department of Energy's ("DOE") regulations,² Sabine Pass Liquefaction, LLC ("SPL") hereby requests that DOE, Office of Fossil Energy ("DOE/FE") grant long-term multi-contract authorization for SPL to engage in exports of domestically produced liquefied natural gas ("LNG") to any nation with which the United States does not now or in the future have a free trade agreement ("FTA") requiring the national treatment for trade in natural gas that has, or in the future develops, the capacity to import LNG and with which trade is not prohibited by U.S. law or policy ("Non-FTA Nations").³ Through this application, SPL seeks to export additional volumes of LNG from the

¹ 15 U.S.C. § 717b (2012).

² 10 C.F.R. Part 590 (2015).

SPL is currently authorized to export up to the equivalent of 803 billion standard cubic feet ("Bcf") per year ("Bcf/y") of natural gas to Non-FTA Nations. Sabine Pass Liquefaction, LLC, Final Opinion and Order Granting Long-term Authorization to Export Liquefied Natural Gas from Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations DOE/FE Order No. 2961-A, FE Docket No. 10-111-LNG (Aug. 7, 2012) [hereinafter DOE/FE Order No. 2961-A]; Sabine Pass Liquefaction, LLC, Opinion and Order Conditionally Granting Long-term Authorization to Export Liquefied Natural Gas from Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations, DOE/FE Order No. 2961, FE Docket No. 10-111-LNG, (May 20, 2011) [hereinafter DOE/FE Order No. 2961].

Sabine Pass Liquefaction Project (Trains 1 through 4) ("Liquefaction Project")⁴ in an amount up to the equivalent of approximately 203 Bcf/y (or 0.56 Bcf per day ("Bcf/d")) of natural gas.⁵ SPL is seeking such authorization for a 20-year period commencing on the date of first commercial export from the Liquefaction Project. In support of the instant application ("Application"), SPL provides as follows:

10 C.F.R. § 590.202(a):

1. Exact legal name of applicant:

The exact legal name of the applicant is Sabine Pass Liquefaction, LLC. SPL has its principal place of business in Houston, Texas.

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The Liquefaction Project is currently under construction, and the instant request requires no new construction or modification of authorized facilities. The Liquefaction Project is being developed by SPL and its affiliate, Sabine Pass LNG, L.P. ("Sabine Pass LNG"), at the existing Sabine Pass LNG import, storage and vaporization terminal in Cameron Parish, Louisiana ("Sabine Pass LNG Terminal"). The Federal Energy Regulatory Commission ("Commission" or "FERC") authorized the construction and operation of the Liquefaction Project in 2012. See Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., 139 FERC ¶ 61,039 (2012), reh'g denied, 140 FERC ¶ 61,076 (2012); Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., 144 FERC ¶ 61,099 (2013). In a February 2014 amendment, the Commission authorized an increase in the production capacity of the Liquefaction Project to reflect maximum LNG production and export capability under optimized operational conditions. Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., 146 FERC ¶ 61,117 (2014) [hereinafter 2014 FERC Order].

The instant application is proposed for the purpose of aligning the volumes authorized for export to Non-FTA Nations with the liquefaction production capacity of the Liquefaction Project, as already approved by FERC. 2014 FERC Order, supra note 4. DOE/FE recently authorized an order to align the volumes approved for exports to FTA nations with the amended capacity authorized by FERC. See Sabine Pass Liquefaction, LLC, Order Granting Long-term Multi-contract Authority to Export LNG by Vessel from the Sabine Pass LNG Terminal in Cameron Parish, Louisiana, to Free Trade Agreement Nations, DOE/FE Order No. 3595, FE Docket No. 14-92-LNG (Feb. 12, 2015) and Errata modifying DOE/FE Order No. 3595 & DOE/FE Order No. 3384 (Feb. 24, 2015) [hereinafter 2015 FTA Authorization]; Sabine Pass Liquefaction, LLC, Order Granting Long-term Authorization to Export Liquefied Natural Gas from Sabine Pass LNG Terminal to Free Trade Nations, DOE/FE Order No. 2833, FE Docket No. 10-85-LNG (Sept. 7, 2010).

2. Service list contacts:

All correspondence and communications concerning this Application, including all service of pleadings and notices, should be directed to the following persons:⁶

Patricia Outtrim Lisa M. Tonery Rina Chang Tania S. Perez

Cheniere Energy, Inc.

Norton Rose Fulbright US LLP

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3. Statement of action sought from DOE/FE:

SPL hereby requests that DOE/FE grant long-term, multi-contract authorization for SPL to export 203 Bcf/y of natural gas in the form of LNG from the Liquefaction Project, currently under construction, to Non-FTA Nations. SPL is herein seeking the issuance by DOE/FE of authorization to export LNG for a 20-year term commencing on the date of first commercial export from the Liquefaction Project.

SPL is requesting this authorization both on its own behalf and as agent for other parties who will hold title to the LNG at the time of export. SPL will comply with all DOE/FE requirements for exporters and agents, including the registration requirements as first established in DOE/FE Order No. 2913,8 and most recently set forth in DOE/FE Order No. 3600.9 In this

SPL requests waiver of Section 590.202(a) of DOE's regulations, 10 C.F.R. § 590.202(a) (2015), to the extent necessary to include outside counsel on the official service list in this proceeding.

See supra notes 4-5.

Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, Order Granting Long-Term Authorization to Export Liquefied Natural Gas from Freeport LNG Terminal to Free Trade Nations, DOE/FE Order No. 2913, FE Docket No. 10-160-LNG, at 9-10 (Feb. 10, 2011).

Downeast LNG, Inc., Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas from the Proposed Downeast LNG Terminal in Robbinston, Maine, to Free Trade Agreement Nations,

regard, SPL, when acting as agent, will register with DOE/FE each LNG title holder for whom it seeks to export as agent, and will provide DOE/FE with a written statement by the title holder acknowledging and agreeing to (i) comply with all requirements in SPL's long-term export authorization; and (ii) include those requirements in any subsequent purchase or sale agreement entered into by the title holder. SPL also will file—or cause to be filed—any relevant long-term commercial agreements that it enters into with the LNG title holders on whose behalf the exports are performed.

DOE/FE may fulfill its requirements under the National Environmental Policy Act ("NEPA")¹⁰ through a categorical exclusion.¹¹ A categorical exclusion is appropriate in the instant Application because, as detailed below, the authorization requested does not involve any new construction or modifications to authorized facilities.¹² Further, SPL respectfully requests that the DOE/FE issue the Authorization as requested herein by July 1, 2015.

DOE/FE Order No. 3600, FE Docket No. 14-172-LNG, at 11-12 (Mar. 6, 2015) [hereinafter *DOE/FE Order No. 3600*].

¹⁰ 42 U.S.C. §§ 4321 et seq. (2012).

Categorical exclusions apply to categories of actions the implementing agency has determined are not expected to have individually or cumulatively significant environmental impacts. 40 C.F.R. § 1508.4 (2014). DOE's regulations set forth a categorical exclusion for "[a]pprovals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under Section 3 of the NGA that involve minor operational changes (such as changes in natural gas throughput, transportation, and storage operations) but not new construction." 10 C.F.R. Part 1021, Subpart D, Appendix B, B5.7 (*Import or export of natural gas, with operational changes*) (2015).

Notably, unlike the DOE regulations, which provide for a categorical exclusion in cases, as here, that involve no new construction, FERC's regulations implementing NEPA provide no such categorical exclusion for Section 3 facilities. 18 C.F.R. § 380.4 (2014). In granting the 2014 FERC Order, the Commission conducted a NEPA review and concluded that the request for authorization to export additional volumes of LNG from the Liquefaction Project, as requested herein, will result in no adverse environmental impacts.

4. <u>Justification for the action sought from DOE/FE, including why such action is not inconsistent with the public interest:</u>

Granting the authorization requested herein is justified pursuant to Section 3 of the NGA. SPL's Application must be reviewed under Section 3(a) of the NGA, which provides that DOE/FE is required to authorize exports to a foreign country unless there is a finding that such exports "will not be consistent with the public interest." Section 3(a) of the NGA states in relevant part:

(a) Mandatory authorization order

After six months from June 21, 1938, no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so. The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest.¹⁴

Section 3(a) thus creates a presumption in favor of approval of an application for non-FTA authorization, which opponents bear the burden of overcoming. Moreover, there is ample evidence in the public record that exports of LNG, such as those requested by SPL in this Application, are in the public interest. In this regard, in granting SPL's request for export authorization to Non-FTA Nations in Order Nos. 2961 and 2961-A, DOE/FE pointed to market studies and other evidence and comments that SPL submitted in that proceeding demonstrating the substantial economic and public benefits that are likely to follow from exports of natural gas as LNG. That same rationale is equally applicable here, and SPL incorporates herein by reference the substantial record that it developed demonstrating the public interest benefits of

¹³ 15 U.S.C. § 717b(a).

¹⁴ *Id*.

See supra note 3.

exports in FE Docket No. 10-111-LNG.¹⁶ Additionally, SPL makes reference to the studies commissioned by DOE and discussed in Appendix A hereto.¹⁷ Finally, and as provided more fully below, the domestic supply of natural gas exceeds domestic demand dramatically.

10 C.F.R. § 590.202(b):

1. <u>Scope of the project, including volumes of natural gas involved, dates of commencement and completion of proposed export and facilities to be utilized or constructed:</u>

SPL herein requests authorization to export LNG in an amount up to the equivalent of approximately 203 Bcf/y of natural gas from the Liquefaction Project. Trains 1 through 4 of the Liquefaction Project currently are under construction, and no additional construction or modification of authorized facilities is required for the export of the additional volumes as requested herein.¹⁸ SPL anticipates that exports will commence in 2016.

2. Source and security of the natural gas supply to be exported:

SPL will purchase natural gas to be used as fuel and feedstock for LNG production from the interstate and intrastate grid at points of interconnection with other pipelines and points of liquidity both upstream and downstream of the Cheniere Creole Trail Pipeline, L.P. system and other systems that will interconnect with the Liquefaction Project. Through these

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See Sabine Pass Liquefaction, LLC, Application for Long-Term Authorization to Export Liquefied Natural Gas, FE Docket No. 10-111-LNG, at 33–67 (Sept. 7, 2010) (discussing how the Liquefaction Project would provide a market solution for further deliberate development of emerging sources of domestic natural gas, result in benefits to the public, and otherwise be in the public interest) [hereinafter Sabine 2010 Application].

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

See supra notes 4-5.

interconnections, the Liquefaction Project will have access to virtually any point on the U.S. interstate pipeline system through direct delivery or by displacement.¹⁹ As noted in DOE/FE Order No. 2961, the proximity of the Liquefaction Project to multiple interstate and intrastate pipelines will enable SPL to purchase natural gas from multiple conventional and unconventional basins located across the region, state, and virtually anywhere in the nation.²⁰ This supply can be sourced in large volumes in the spot market, or pursued under long-term arrangements. To date, SPL has entered into a number of long-term gas supply purchase confirmation transactions ("Confirmations") associated with the long-term supply of natural gas to the Liquefaction Project.²¹ The Confirmations are not tied to individual trains or specific export sales and purchase agreements or DOE/FE authorizations, but rather, the natural gas secured under the Confirmations will be liquefied for export as required to meet SPL's commercial commitments.

3. Identification of participants in the transaction, and affiliations:

SPL is an indirect subsidiary of Cheniere Energy Partners, L.P. ("Cheniere Partners"), a Delaware limited partnership, majority owned by Cheniere Energy, Inc. ("Cheniere Energy"). Cheniere Partners is a Delaware limited partnership with its primary place of business in Houston, Texas, and Cheniere Energy is a Delaware corporation with its primary place of business in Houston, Texas. Cheniere Energy, both of its own accord and through Cheniere

SPL has previously explained that the historically prolific Gulf Coast Texas and Louisiana onshore gas fields, the gas fields in the Permian, Anadarko, and Hugoton basins, and the unconventional gas fields in the Barnett, Haynesville, Eagle Ford, Fayetteville, Woodford, and Bossier basins represent the most likely sources of physical supply. *See Sabine 2010 Application, supra* note 16, at 35–38. Given the large size of the reserves in these fields and, in particular, the well-documented increase in production associated with the emerging unconventional resources, the proposed exports are not anticipated to have any meaningful impact on the availability or pricing of domestic natural gas. *See id.*

DOE/FE Order No. 2961, supra note 3, at 5.

The Confirmations have been submitted to DOE/FE in compliance with 10 C.F.R. Part 590 and DOE/FE Order Nos. 2961-A and 2833.

Partners, is a developer of LNG terminals and natural gas pipelines on the Gulf Coast, including the Sabine Pass LNG Terminal. SPL is authorized to do business in the States of Texas and Louisiana.

4. Terms of the transaction:

As reflected above, SPL has entered into, and submitted to DOE/FE, Confirmations associated with the long-term supply of natural gas to the Liquefaction Project. SPL has not yet entered into any long-term export contracts specific to the authorization requested herein. Accordingly, SPL is not submitting transaction-specific information herewith, and requests that DOE/FE make a similar finding to that in DOE/FE Order No. 2961,²² and most recently set forth in DOE/FE Order No. 3600,²³ with regard to the transaction-specific information requested in Section 590.202(b) of the DOE regulations.

SPL will file—or cause to be filed—either unredacted contracts, or long-term contracts under seal, with either: (i) a copy of each long-term contract with commercially sensitive information redacted, or (ii) a summary of all major provisions of the contracts including, but not limited to, the parties to each contract, contract term, quantity, any take-or-pay or equivalent provisions/conditions, destinations, re-sale provisions, and other relevant provisions.

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See supra note 3, at 41.

See supra note 9.

5. Lack of domestic need for the gas to be exported:

As discussed more fully in Appendix A, it is evident from the current supply/demand balance in the United States that the Application's request for authorization to export U.S. natural gas production will not impinge on any domestic need for the gas.²⁴

6. Environmental impact:

SPL respectfully submits that a categorical exclusion applies to the authorization requested in the instant Application. A categorical exclusion is appropriate because the request for authorization to export additional volumes of LNG from the Liquefaction Project does not involve any new construction or modifications to existing facilities.

Under the Council on Environmental Quality's ("CEQ") regulations and Guidance, categorical exclusions apply to categories of actions the implementing agency has determined are not expected to have individually or cumulatively significant environmental impacts. Because FERC regulations do not provide for a categorical exclusion for an action under NGA Section 3, FERC had occasion to conduct a NEPA analysis related to the increase in LNG production capacity of the Liquefaction Project. As discussed below, FERC concluded that the additional LNG production capacity of the Liquefaction Project involved "no additional construction of new facilities or the modification of the previously authorized facilities." Rather, the proposed increase in production capacity represents the maximum or peak LNG production and export capability of the liquefaction trains under optimal operating

See Sabine 2010 Application, supra note 16, at 50–54 (explaining that supply/demand balance demonstrates the lack of regional/national need).

See 40 C.F.R. § 1508.4; see also Final Guidance on Improving the Process for Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act, 77 Fed. Reg. 14,473 (2012).

Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., Environmental Assessment Report, FERC Docket No. CP14-12-000 (Jan. 24, 2014).

conditions. Unlike FERC, DOE's regulations set forth a categorical exclusion for actions related to authorizations for the export of natural gas under Section 3 of the NGA that involve minor operational changes (such as changes in natural gas throughput, transportation and storage operations) but not new construction,²⁷ as is the case in the authorization requested in the instant Application.

The potential environmental impacts associated with the export of additional volumes of LNG from the Liquefaction Project (in the amount contemplated herein) were considered by FERC in Docket No. CP14-12-000. More specifically, based on the Environmental Assessment Report issued by FERC on January 24, 2014, the Commission approved SPL and Sabine Pass LNG's request to increase the Liquefaction Project's authorized maximum capacity from 2.2 Bcf/d to approximately 2.76 Bcf/d (an increase of 0.56 Bcf/d) because it did not constitute a major federal action significantly affecting the quality of the human environment.²⁸

WHEREFORE, SPL respectfully requests that DOE/FE grant its request for long-term, multi-contract authorization to engage in exports of 203 Bcf/y of domestically produced LNG from the Liquefaction Project to Non-FTA Nations, for a 20-year period commencing on the date

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See supra note 11. DOE/FE recently applied the categorical exclusion set out at B5.7 in the context of proposed LNG exports from the United States. See Carib Energy (USA) LLC, Categorical Exclusion Determination, DOE/FE Docket No. 11-141-LNG (May 30, 2014). See also ConocoPhillips Alaska Natural Gas Corp., Categorical Exclusion Determination, DOE/FE Docket No. 13-155-LNG (Apr. 3, 2014) (applying a categorical exclusion to ConocoPhillips' application to engage in exports of LNG to Non-FTA Nations under circumstances which require no new facilities or modifications to existing facilities). Proposed actions within a categorical exclusion category do not require further analysis and documentation in an Environmental Assessment or an Environmental Impact Statement. 10 C.F.R. § 1021.400. A categorical exclusion can be used after determining that a proposed action falls within the categories of actions described in the categorical exclusion and that there are no extraordinary circumstances indicating further environmental review is warranted. Id. at § 1021.410.

²⁸ 2014 FERC Order, supra note 4, at P 20.

of first export commercial export from the Liquefaction Project. SPL respectfully requests that the DOE/FE issue the authorization as requested herein by July 1, 2015.

Respectfully submitted,

Lisa M. Tonery

Tania S. Perez Attorneys for

Sabine Pass Liquefaction, LLC

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Dated: April 20, 2015

Appendix A

Further Discussion of the Projected Need for the Natural Gas to be Exported

The Liquefaction Project is motivated by the improved outlook for domestic natural gas production stemming from drilling productivity gains that have enabled rapid growth in supplies in the Gulf Coast region and elsewhere in the United States.²⁹ In this regard, SPL submits that the lack of domestic need for the LNG necessary to support the export of additional volumes from the Liquefaction Project is clear from the existing and projected trends concerning U.S. gas demand and supply.

As a preliminary matter, DOE/FE already determined that exports from the Liquefaction Project are not inconsistent with the public interest.³⁰ In fact, DOE/FE found LNG exports will result in various tangible economic and public benefits.³¹ A study prepared last year by NERA Economic Consultants for Cheniere Energy, which updated the 2012 *NERA Report* commissioned by DOE/FE, supports DOE/FE's finding.³² Specifically, the *NERA Update* found "[a]cross the scenarios [analyzed], US economic welfare consistently increases as the volume of natural gas exports increases. This includes scenarios in which there are unlimited exports."³³

See generally EIA, Natural Gas Gross Withdrawals and Production, http://www.eia.gov/dnav/ng/ng prod sum dcu NUS a.htm (last visited Mar. 25, 2015).

³⁰ *DOE/FE Order No. 2961-A, supra* note 3, at 29.

DOE/FE Order No. 2961, supra note 3, at 37–38. (noting the various benefits resulting from the proposed exports include (1) "significant increased economic activity and job creation ...", (2) "enhanced support for continued natural gas exploration and development activities to supply the export market", (3) "increases in local, state and federal tax revenues" and (4) "the multiplier effects of all of these developments on the national economy and welfare").

NERA Econ. Consulting, *Updated Macroeconomic Impacts of LNG Exports from the United States* (Mar. 24, 2014), *available at*http://www.nera.com/content/dam/nera/publications/archive2/PUB_LNG_Update_0214_FINAL.pdf
[hereinafter *NERA Update*].

³³ *Id.* at 7.

As provided by DOE precedent, domestic need for the natural gas proposed to be exported is "the only explicit criterion that must be considered in determining the public interest." DOE's 1984 *Policy Guidelines* are consistent with this notion: "[t]he market, not the government, should determine the price and other contract terms of imported [and exported] gas," and that "the federal government's primary responsibility ... should be to evaluate the need for the gas" SPL submits that the Liquefaction Project supports and encourages the continued development of natural gas resources during times when domestic prices of natural gas are depressed, and subsidizes the production of a quantity of natural gas that can be deployed on short notice when and if market prices induce the cancellation of the export of LNG cargoes, thereby mitigating price volatility that would otherwise arise and ensuring that domestic supplies will be available over the duration of commodity market cycles.

Furthermore, innovations in the market have resulted in the availability of potential supplies that far exceed market need for the foreseeable future. The EIA's *Annual Energy Outlook 2014* demonstrates that the United States has significant natural gas resources available to meet projected future domestic needs, including the quantities contemplated for export under

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Phillips Alaska Nat. Gas Corp. & Marathon Oil Co., DOE/FE Order No. 1473, at 14 (Apr. 2, 1999) [hereinafter Phillips Alaska]. "In prior decisions, however, DOE/FE has identified a range of factors that it evaluates when reviewing an application for export authorization. These factors include economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others." Freeport LNG Expansion, L.P., et al., Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations, DOE/FE Order No. 3282-C, FE Docket No. 10-161-LNG, at 9 (Nov. 14, 2014).

DOE, New Policy Guidelines and Delegation Orders from Secretary of Energy to Economic Regulatory Administration and Federal Energy Regulatory Commission Relating to the Regulation of Imported Natural Gas, 49 Fed. Reg. 6684, 6685 (Feb. 22, 1984). While the Policy Guidelines addressed natural gas imports, DOE/FE has recognized that their "principles are applicable to exports as well." Phillips Alaska, supra note 34, at 14.

this Application.³⁶ Moreover, analyses performed and commissioned by DOE, show that LNG exports from the United States would not result in adverse price impacts to U.S. consumers.

1. National Supply – Overview

Domestic natural gas production has increased rapidly in recent years as innovations in new drilling and completion technologies have enhanced productivity.³⁷ Since 2005, U.S. marketed natural gas production has grown approximately 44%, from 18.9 Tcf to about 27.3 Tcf in 2014, representing the highest production levels in U.S. history.³⁸ Increased drilling productivity has enabled domestic production to continue expanding despite a sharp reduction in capital deployed by industry in upstream development.³⁹

The outlook for future increases in domestic natural gas supply capacity is robust and is reflected in the *AEO 2014*. The *AEO 2014* Reference Case projects a 56% increase in total natural gas production between 2012 and 2040, with shale gas production accounting for 53% of total production by 2040.⁴⁰ As natural gas reserves continue to expand due to the development of unconventional formations and the oil and gas industry continues to improve drilling and extraction techniques, the total amount of natural gas production continues to increase despite a

EIA, Annual Energy Outlook 2014 with Projections to 2040, (Apr. 2014), available at http://www.eia.gov/forecasts/aeo/mt_naturalgas.cfm [hereinafter AEO 2014].

See generally EIA, Today in Energy: Growth in U.S. Hydrocarbon Production from Shale Resources Driven by Drilling Efficiency (Mar. 11, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=15351.

See EIA, U.S. Natural Gas Marketed Production, http://www.eia.gov/dnav/ng/hist/n9050us2A.htm (last visited Mar. 24, 2015).

According to Baker Hughes, there were 233 rigs drilling for natural gas in the United States during the week ended March 27, 2015, a 26.7% decrease from the 318 rigs targeting natural gas the year prior. See Baker Hughes, U.S. Rig Count – Year to Year Comparisons, http://gis.bakerhughesdirect.com/Reports/YeartoYearComparisonForProduct.aspx (last visited Mar. 27, 2015).

⁴⁰ *AEO 2014*, supra note 36, at MT-23.

reduction of rigs.⁴¹ Total U.S. dry gas production is projected to be 37.54 Tcf by 2040 in the Reference Case, with a 1.6% annual growth rate between 2012 and 2040.⁴²

2. National Natural Gas Demand

Due to the development of shale gas formations, production of natural gas is outpacing demand despite demand increases since 2009.⁴³ Indeed, the United States is forecasted to become a net exporter before 2020 because increased production (coupled with a decline in natural gas imports) will outpace increasing demand.⁴⁴

In the *AEO 2014* Reference Case, EIA predicts demand for natural gas to grow at an annual rate of only 0.8% from 2012 to 2040 while, as noted above, total U.S. dry gas production during the same period is projected to double.⁴⁵ Moreover, the average energy use per person from 2012 to 2040 is forecasted to decline as the U.S. economy is lowering its energy use, despite a population increase of 0.7% per year from 2012 to 2040.⁴⁶ Energy use per capita is projected to decline to 279 million British thermal units ("Btu") per person in 2040 (a level not seen since 1965) according to the *AEO 2014* Reference Case, down from 302 million Btu in 2012.⁴⁷ The projected decline is due to a combination of factors, including more efficient

The Brattle Group, *Understanding Natural Gas Markets*, at 8, 10 fig.9 (September 2014) (prepared for the American Petroleum Institute), *available at* http://www.api.org/~/media/files/oil-and-natural-gas/natural-gas-primer/understanding-natural-gas-markets-primer-high.pdf [hereinafter *Brattle Report*]; *see also* EIA, *Drilling Productivity Report for Key Tight Oil and Shale Gas Regions* (Mar. 9, 2015), *available at* http://www.eia.gov/petroleum/drilling/pdf/dpr-full.pdf.

⁴² AEO 2014, supra note 36, at A-27.

Brattle Report, supra note 41, at 3.

⁴⁴ AEO 2014, supra note 36, at MT-22. The EIA projects that U.S. exports of natural gas will be 5.8 Tcf in 2040. *Id.*

⁴⁵ *Id.* at A-27.

⁴⁶ *Id.* at MT-5.

⁴⁷ *Id*.

appliances and vehicles.⁴⁸ The 0.8% annual increase in natural gas consumption is primarily due to its use in electricity generation and in the industrial sector.⁴⁹

a. Industrial Sector

Consumption of natural gas by U.S. industrial end-users is projected to see modest expansion through 2040 due to low natural gas prices from steady increased domestic natural gas production. The *AEO 2014* Reference Case projects U.S. industrial sector demand will grow an average of 0.7% annually to total 8.68 Tcf in 2040 from 7.14 Tcf consumed in 2012. The sector demand will grow an average of 0.7% annually to total 8.68 Tcf in 2040 from 7.14 Tcf consumed in 2012.

b. Residential and Commercial Sectors

EIA forecasts a contraction in future residential consumption of natural gas as customer growth is offset by efficiency gains. U.S. residential natural gas demand is forecasted in *AEO* 2014 to decline modestly to 4.12 Tcf in 2040 from 4.17 Tcf in 2012.⁵² The residential sector's overall natural gas use is 1% lower in 2040 than in 2012.⁵³ Natural gas use declines in every end-use service except space heating, and continues to account for a significant portion of water heating and cooking.⁵⁴

Commercial sector natural gas use is projected in the *AEO 2014's* Reference Case to experience modest annual growth of 0.7%, reaching 3.57 Tcf in 2040 from 2.90 Tcf in 2012.⁵⁵

⁴⁹ *Id.* at MT-6.

⁴⁸ *Id*.

⁵⁰ *Id.* at MT-5, MT-11.

⁵¹ *Id.* at A-27.

⁵² *Id.*

⁵³ *Id.* at MT-7.

⁵⁴ *Id*.

⁵⁵ *Id.* at A-27.

c. Electricity Sector

Natural gas demand in the electric generating sector is forecasted in the *AEO* 2014 Reference Case to increase by an average of 0.7% per year, expanding to 11.23 Tcf in 2040 from 9.25 Tcf in 2012.⁵⁶ The steady growth of natural gas-fired generation in the electricity sector is occurring mostly in regions decreasing coal-fired capacity, which is primarily driven by new environmental regulations leading to the retirement of coal-fired generation.⁵⁷

d. Transportation Sector

Natural gas consumed for transportation increases but accounts for a small portion of the total domestic gas market.⁵⁸ The EIA in its *AEO 2014* Reference Case forecasts that transportation sector demand will grow 11.3% annually to 0.85 Tcf in 2040 from 0.04 Tcf in 2012.⁵⁹ The use of natural gas by heavy-duty vehicles, trains and ships are the vast majority of growth in natural gas consumption in this sector.⁶⁰

3. Supply-Demand Balance Demonstrates the Lack of National Need

Trends in the U.S. natural gas market make evident that there is little, if any, domestic need for the natural gas that would be exported as a result of the requested authorization. U.S. natural gas production has been growing at more than twice the rate of domestic demand growth since 2005.⁶¹ Moreover, the *AEO 2014* forecasts that the U.S. will become a net exporter of

⁵⁶ *Id*.

⁵⁷ *Id.* at MT-6 and MT-16

⁵⁸ *Id.* at MT-21.

⁵⁹ *Id.* at A-27.

⁶⁰ *Id.* at MT-15 and MT-21.

Marketed production of natural gas grew by approximately 8.4 Tcf from 2005 to 2014, to 27.3 Tcf from 18.9 Tcf, compared to growth of approximately 4.8 Tcf in domestic consumption, to 26.8 Tcf from 22.0 Tcf, over the same nine-year period. *Compare* EIA, *U.S. Natural Gas Marketed Production* at http://www.eia.gov/dnav/ng/hist/n9050us2a.htm with EIA, *U.S. Natural Gas Total Consumption* at http://www.eia.gov/dnav/ng/hist/n9140us2a.htm (last visited Mar. 25, 2013).

natural gas after 2020 because production is growing faster than natural gas use.⁶² These trends demonstrate that available natural gas reserves exceed current demand, and that future resources exist well in excess of projected long-term domestic needs. Therefore, the surplus of deliverable supply in excess of foreseeable U.S. market demand demonstrates that resources are available for export and would not interfere with the public interest.

4. Price Impacts

SPL's assertions are further supported by economic projections of the impact on domestic natural gas markets resulting from future LNG exports. DOE/FE has commissioned three studies to evaluate the effects of LNG exports on the U.S. economy, all of which confirm that U.S. LNG "exports will benefit the economy as a whole." The first DOE commissioned study, analyzing the effects of four levels of U.S. LNG exports—between 6 Bcf/d and 12 Bcf/d, at low and high rates of export growth—on domestic energy markets, was released by EIA in January 2012. It should be noted that the 2012 EIA Export Study did not consider macroeconomic effects; and its scenarios were all provided in the context of the EIA's Annual Energy Outlook 2011, whose Reference Case projected dry gas production levels of 26.32 Tcf by 2035, as compared with a projected 2035 production level of 36.09 Tcf (37%)

⁶² AEO 2014, supra note 36, at MT-22.

⁶³ LNG Development Co., LLC (d/b/a Oregon LNG), Order Conditionally Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Oregon LNG Terminal in Warrenton, Clatsop County, Oregon to Non-Free Trade Agreement Nations, DOE/FE Order No. 3465, FE Docket No. 12-77-LNG, at 99 (July 31, 2014).

⁶⁴ 2012 EIA Export Study, supra note 17, at 1.

⁶⁵ *Id.* at 3.

⁶⁶ *Id.* at 1.

⁶⁷ EIA, Annual Energy Outlook 2011 with Projections to 2035, at 141 (Apr. 2011), available at http://www.eia.gov/forecasts/archive/aeo11/pdf/0383(2011).pdf.

higher) in the *AEO 2014* Reference Case.⁶⁸ The *2012 EIA Export Study* projected that natural gas prices would rise over time, even in the baseline case which included no additional LNG exports.⁶⁹ The *2012 EIA Export Study* further projected that increased LNG exports would lead to increased natural gas wellhead prices under the reference case supply forecast, with all four scenarios analyzed leading to price increases followed by declines.⁷⁰ Initial price increases were projected to be more significant in scenarios that assumed lower supply.⁷¹

The DOE commissioned the December 2012 NERA Economic Consulting report to assess the macroeconomic impacts (including on domestic natural gas prices) of various levels of LNG exports (ranging from 370 Bcf to 4,380 Bcf). The NERA Report found that "[i]n all of the scenarios analyzed," the United States "would experience net economic benefits from increased LNG exports." Additionally, the NERA Report concluded that natural gas "price changes attributable to LNG exports remain in a relatively narrow range across the entire range of scenarios."

Unlike the 2012 EIA Export Study which "was limited to the relationship between export levels and domestic prices without, for example, considering whether or not those quantities of exports could be sold at high enough world prices to support the calculated domestic prices," the NERA Report explained that "[t]he market limits how high U.S. natural gas prices can rise under pressure of LNG exports, because importers will not purchase U.S.

⁶⁸ AEO 2014, supra note 36, at A-27.

^{69 2012} EIA Export Study, supra note 17, at 7.

⁷⁰ *Id.* at 8.

⁷¹ *Id.* at 9.

⁷² *NERA Report*, *supra* note 17, at 1, 10.

⁷³ *Id.* at 6.

⁷⁴ *Id.* at 2.

⁷⁵ *Id.* at 3.

exports if the U.S. wellhead price rises above the cost of competing supplies."⁷⁶ Therefore, the *NERA Report* price increase estimates were largely lower than those estimated in the *2012 EIA Export Study*, ⁷⁷ and the *NERA Report* contradicted the *2012 EIA Export Study*, estimating that the peak natural gas export levels and resulting price increases analyzed therein are "not likely."⁷⁸)

Regardless, the *NERA Report* found net benefits to U.S. consumers even in the export scenarios that led to the most significant theoretical price increases projected by the EIA. Across the scenarios, including those with unlimited exports, U.S. economic welfare consistently increased as the volume of natural gas exports increased. There is a net gain for the U.S. economy (as measured by a broad metric of economic welfare or by more common measures such as real household income or real GDP) even though domestic natural gas prices are pulled up by LNG exports, because the value of those exports also rises. Despite consumer costs in the form of higher energy prices and lower consumption, and higher costs to supply the additional natural gas for export incurred by producers, increases in export revenues along with a wealth transfer from overseas received in the form of payments for liquefaction services more than offset consumer and producer costs. Thus, the *NERA Report* concluded that the net result would be an increase in U.S. households' real income and welfare, ⁷⁹ and noted the projected net

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⁷⁶ *Id*. at 6.

Id. at 4 ("NERA replaced the export levels specified by DOE/FE and prices estimated by EIA with lower levels of exports (and, *a fortiori* prices)"); see also id. at 10 ("U.S. natural gas prices do not reach the highest levels projected by EIA.") (internal citation omitted).

⁷⁸ *Id.* at 9.

Id. at 6 (internal citation omitted); *see also id.* at 12 ("Even with the highest prices estimated by EIA for these hypothetical cases, NERA found that there would be net economic benefits to the U.S., and the benefits became larger, the higher the level of exports.").

economic benefits are "exactly the outcome that economic theory describes when barriers to trade are removed." 80

Last year, EIA produced a second DOE commissioned study evaluating the domestic energy market effects of increased LNG exports (ranging from 12 Bcf/d to 20 Bcf/d) from the contiguous United States, using the updated data provided in *AEO 2014*. Similar to the findings in the *NERA Report*, the *2014 Increased Export Study* concluded that increased LNG exports "result in higher levels of economic output," and that investment resulting from increased natural gas production "more than offsets the adverse impact of somewhat higher energy prices when the export scenarios are applied."

80 *Id.* at 1.

⁸¹ 2014 Increased Export Study, supra note 17, at 5.

⁸² *Id.* at 12.

Appendix B OPINION OF COUNSEL



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April 20, 2015

Office of Fuel Programs
Fossil Energy, U.S. Department of Energy
Docket Room 3F-056, FE50
Forrestal Building
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Re: In the Matter of Sabine Pass Liquefaction, LLC
FE Docket No. 15-__-LNG
Application for Long-Term Authorization to Export Liquefied Natural Gas
to Non Free Trade Agreement Nations
Opinion of Counsel

Dear Sir or Madam:

This opinion of counsel is provided in accordance with the requirements of section 590.202(c) of the U.S. Department of Energy's regulations, 10 C.F.R. § 590.202(c) (2015). I have examined the Limited Liability Company Agreement of Sabine Pass Liquefaction, LLC ("SPL") and other authorities as necessary, and have concluded that the proposed exportation of LNG is within SPL's corporate powers. Further, SPL is authorized to do business in Louisiana and Texas, and to engage in foreign commerce.

Respectfully submitted,

By Greg Rayford, Senior Vice President

and General Counsel Cheniere Energy, Inc.

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VERIFICATION

State of New York	
County of New York	

BEFORE ME, the undersigned authority, on this day personally appeared Lisa M. Tonery, who, having been by me first duly sworn, on oath says: that she is the Attorney for Sabine Pass Liquefaction, LLC, and is duly authorized to make this Verification; that she has read the foregoing instrument; and that the facts therein stated are true and correct to the best of her knowledge, information, and belief.

Lisa M. Tonery

SWORN TO AND SUBSCRIBED before me on the Zoth day of April, 2015.

Name: <u>DIONNE MCCALLUM-George</u>

Title: Notary Public

My Commission expiries:

Notary Public, State of New York
No. 01MC6249522
Qualified in Queens County
Commission Expires Oct. 11, 2015