

UNITED STATES OF AMERICA DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY

In the Matter of:)	
CHENIERE MARKETING, LLC)	
CORPUS CHRISTI LIQUEFACTION,)	FE Docket No. 19-124 -LNG
LLC)	

APPLICATION OF CHENIERE MARKETING, LLC and CORPUS CHRISTI LIQUEFACTION, LLC FOR LONG-TERM AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS TO FREE TRADE AGREEMENT AND 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 Cheniere Marketing, LLC ("Cheniere Marketing") and Corpus Christi Liquefaction, LLC ("CCL", and together with Cheniere Marketing, "CMI") hereby request that DOE, Office of Fossil Energy ("DOE/FE") grant long-term multi-contract authorization for CMI to engage in exports of domestically produced liquefied natural gas ("LNG") to (i) any nation that currently has or in the future develops the capacity to import LNG and with which the United States currently has, or in the future enters into, a free trade agreement ("FTA") requiring the national treatment for trade in natural gas and LNG ("FTA Nations") and (ii) any nation with which the United States does not now or in the future have an 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

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¹ 15 U.S.C. § 717b (2012).

² 10 C.F.R. Part 590 (2019).

trade is not prohibited by U.S. law or policy ("Non-FTA Nations").³ Through this application, CMI seeks to export additional volumes of LNG from the Corpus Christi Liquefaction Project (Trains 1 through 3) ("Liquefaction Project") in an amount up to the equivalent of approximately 108.16 Bcf/y of natural gas, for a total Project export of 875.16 Bcf/y.⁴ CMI is seeking such authorization for (i) a 25-year period for exports to FTA Nations and (ii) a 20-year period for exports to Non-FTA Nations, each commencing on the date of first commercial export from the Liquefaction Project of the volumes contemplated herein. In support of the instant application ("Application"), CMI provides as follows:

10 C.F.R. § 590.202(a):

1. Exact legal name of applicant:

The exact legal name of CCL is Corpus Christi Liquefaction, LLC. The exact legal name of Cheniere Marketing is Cheniere Marketing, LLC. Both CCL and Cheniere Marketing have their principal place of business in Houston, Texas.

CMI is currently authorized to export up to the equivalent of 767 billion standard cubic feet ("Bcf") per year ("Bcf/y") of natural gas from the Liquefaction Project to FTA and Non-FTA Nations. *Cheniere Marketing, LLC*, DOE/FE Order No. 3164, FE Docket No. 12-99-LNG (Oct. 16, 2012; *Cheniere Marketing, LLC*, DOE/FE Order Nos. 3538 and 3164-A, FE Docket Nos. 12-97-LNG and 12-99-LNG (Oct. 29, 2014; *Cheniere Marketing, LLC & Corpus Christi Liquefaction, LLC*, DOE/FE Order No. 3638, FE Docket No. 12-97-LNG (May 12, 2015).

The instant application is proposed for the purpose of aligning the volumes authorized for export to FTA and Non-FTA Nations with the liquefaction production capacity of the Liquefaction Project.

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:⁵

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3. Statement of action sought from DOE/FE:

CMI hereby requests that DOE/FE grant long-term, multi-contract authorization for CCL to export an additional 108.16 Bcf/y of natural gas in the form of LNG from the Liquefaction Project to FTA and Non-FTA Nations. CMI is herein seeking the issuance by DOE/FE of authorization to export LNG for (i) a 25-year period for exports to FTA Nations and (ii) a 20-year period for exports to Non-FTA Nations, each commencing on the date of first commercial export from the Liquefaction Project of the volumes contemplated herein.

CMI 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. CMI will comply with all DOE/FE requirements for exporters and agents, including the registration requirements as first established

CMI requests waiver of Section 590.202(a) of DOE's regulations, 10 C.F.R. § 590.202(a) (2019), to the extent necessary to include counsel on the official service list in this proceeding.

in DOE/FE Order No. 2913⁶ and recently set forth in DOE/FE Order No. 4374.⁷ In this regard, CMI, 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 CMI's long-term export authorization; and (ii) include those requirements in any subsequent purchase or sale agreement entered into by the title holder. CMI 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")⁸ through a categorical exclusion.⁹ A categorical exclusion is appropriate for the instant Application because, as detailed below, the authorization requested does not involve any new construction or modifications to authorized facilities.¹⁰ Further, CMI respectfully requests that the DOE/FE issue the Authorization as requested herein by May 1, 2020.

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).

Freeport LNG Expansion, L.P. and FLNG Liquefaction 4, LLC, Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations, DOE/FE Order No. 4374, FE Docket No. 18-26-LNG, at 54-55 (May 28, 2019).

⁸ 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 (2019). 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) (2019).

Notably, unlike the DOE regulations, which provide for a categorical exclusion in cases, as here, that involve no new construction, the Federal Energy Regulatory Commission's ("FERC") regulations implementing NEPA provide no such categorical exclusion for Section 3 facilities. 18 C.F.R. § 380.4 (2019).

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. CMI's request for authorization to export LNG to FTA Nations must be reviewed under Section 3(c) of the NGA. Pursuant to Section 3(c), applications for authorization to export natural gas and LNG to nations with which the United States has an FTA requiring the national treatment for trade in natural gas and LNG are deemed to be in the public interest and must be granted without modification or delay.¹¹ DOE/FE consistently has found that, in light of its statutory obligation, there is no need for it to engage in an analysis of factors affecting the public interest in acting on such applications.

CMI's request for authorization to export LNG to Non-FTA Nations 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.¹³

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

¹¹ 15 U.S.C. §717b(c).

¹² 15 U.S.C. § 717b(a).

¹³ *Id*.

in the public record that exports of LNG, such as those requested by CMI in this Application, are in the public interest.

In this regard, in granting CMI's request for export authorization to Non-FTA Nations in Order No. 3638, ¹⁴ DOE/FE pointed to market studies, and other evidence CMI 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 CMI incorporates herein by reference the substantial record that it developed demonstrating the public interest benefits of exports in FE Docket No. 12-97-LNG. ¹⁵ Additionally, CMI makes reference to the studies commissioned by DOE and discussed in Appendix A hereto. ¹⁶ Finally, and as provided more fully in Appendix A hereto, the domestic supply of natural gas exceeds domestic demand.

10 C.F.R. § 590.202(b):

1. 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:

CMI herein requests authorization to export LNG in an amount up to the equivalent of an additional approximately 108.16 Bcf/y of natural gas from the Liquefaction Project to FTA and

See supra note 3.

Cheniere Marketing, LLC & Corpus Christi Liquefaction, LLC, DOE/FE Order No. 3638, FE Docket No. 12-97-LNG (May 12, 2015).

See e.g., NERA Economic Consulting, Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports 2018), available https://www.energy.gov/sites/prod/files/2018/06/f52/Macroeconomic%20LNG%20Export%20Study%202018.p df; 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 from the United States (Dec. 3, 2012). available http://energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf; EIA, Effect of Increased Natural Gas Exports on Domestic Energy Markets, as Requested by the Office of Fossil Energy (Jan. 2012) [hereinafter 2012 EIA Export Study], available at http://energy.gov/sites/prod/files/2013/04/f0/fe_eia_lng.pdf.

Non-FTA Nations. Trains 1 and 2 of the Liquefaction Project are currently is in service. Train 3 is currently under construction, and is expected to be placed in service in the second half of 2021.

CCL is simultaneously seeking authorization from FERC to increase the authorized LNG production capacity of the Liquefaction Project to 875.16 Bcf/y, which is the projected combined LNG production capacity of Trains 1-3, based on certain enhancements during the engineering, design, and construction process, as well as operational experience to date. This capacity optimization does not involve additional construction of new facilities or impacts to existing permits applicable to the Liquefaction Project. Nor does it require additional LNG vessel transits beyond those already authorized, or any additional environmental impacts. Moreover, it does not involve any changes that could impact the siting analysis previously undertaken by FERC with respect to the Liquefaction Project.

Based on its operating experience to date and various enhancements to maintenance and production processes, CCL has calculated the Liquefaction Project's production and export capability to be approximately 875.16 Bcf/y. Further details on the enhancements are provided herein as Appendix B.

2. <u>Source and security of the natural gas supply to be exported:</u>

CMI purchases 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 Corpus Christi Pipeline. As noted in DOE/FE Order No. 3638, through these interconnections, the Project has access to almost any point on the U.S. interstate pipeline system through direct delivery or by displacement. This supply can be sourced in large volumes in the spot market or pursued under long-term arrangements. To date, CCL has entered into a number of long-term gas supply purchase transactions associated with the long-term

supply of natural gas to the Liquefaction Project.¹⁷ These transactions 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 transactions will be liquefied for export as required to meet CMI's commercial commitments.

3. <u>Identification of participants in the transaction, and affiliations:</u>

CCL and Cheniere Marketing are indirect subsidiaries of Cheniere Energy, Inc. (NYSE MKT: LNG), a publicly-traded corporation that is a developer of LNG terminals and natural gas pipelines on the Gulf Coast, including the Liquefaction Project. CCL and Cheniere Marketing are authorized to do business in the States of Texas.

4. <u>Terms of the transaction:</u>

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

CMI 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

Confirmations of such transactions have been submitted to DOE/FE in compliance with 10 C.F.R. Part 590 and DOE/FE Order Nos. 3164, 3164-A, and 3686.

¹⁸ *DOE/FE Order No.* 2961.

limited to, the parties to each contract, contract term, quantity, any take-or-pay or equivalent provisions/conditions, re-sale provisions, and other relevant provisions.

5. <u>Lack of domestic need for the gas to be exported:</u>

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 will not impinge on any domestic need for the gas.

6. Environmental impact:

CMI 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 or permits.

Under the Council on Environmental Quality's 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. ¹⁹ The proposed increase in production capacity represents the projected LNG production and export capability of the liquefaction trains under optimal operating conditions and involves no additional construction of new facilities or the modification of the previously authorized facilities. In this regard, 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

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).

in natural gas throughput, transportation and storage operations) but not new construction, ²⁰ as is

the case in the authorization requested in the instant Application.

Because the FERC regulations do not provide for a categorical exclusion for an action

under NGA Section 3, FERC will be required to conduct a NEPA analysis related to the increase

in LNG production capacity of the Liquefaction Project. Therefore, any potential environmental

impacts associated with the export of additional volumes of LNG from the Liquefaction Project

(in the amount contemplated herein) will be fully considered by FERC.

WHEREFORE, CMI respectfully requests that DOE/FE grant its request for long-term,

multi-contract authorization to engage in exports of an additional 108.16 Bcf/y of domestically

produced LNG from the Liquefaction Project to FTA and Non-FTA Nations, for (i) a 25-year

period for exports to FTA Nations and (ii) a 20-year period for exports to Non-FTA Nations, each

commencing on the date of first export commercial export of such volumes from the Liquefaction

Project. CMI respectfully requests that the DOE/FE issue the authorization as requested herein by

May 1, 2020.

Respectfully submitted,

/s/Lisa M. Tonery

Lisa M. Tonery

Mariah T. Johnston

Attorneys for

Corpus Christi Liquefaction, LLC &

Cheniere Marketing, LLC

Dated: September 27, 2019

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.

Appendix A

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

Appendix A

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

Natural gas production levels continue to outpace domestic demand and support the export of additional volumes from the Project. Both existing and projected trends concerning U.S. gas demand and supply indicate that additional exports will have a positive impact on the U.S. economy.

Notably, DOE/FE has already determined that exports from the Project are not inconsistent with the public interest. In fact, DOE/FE has previously found LNG exports will likely result in various economic benefits. The most recent DOE/FE study, prepared last year by NERA Economic Consulting, supports DOE/FE's finding. Specifically, the 2018 LNG Export Study found that [e]ven the most extreme scenarios of high LNG exports that are outside the more likely probability range...show higher overall economic performance in terms of GDP, household income, and consumer welfare than lower export levels associated with the same domestic supply scenarios." The 2018 LNG Export Study also found that "[i]ncreased exports of natural gas will improve the U.S. balance of trade and result in a wealth transfer into the United States."

¹ Cheniere Marketing, LLC, DOE/FE Order No. 3164, FE Docket No. 12-99-LNG (Oct. 16, 2012; Cheniere Marketing, LLC, DOE/FE Order Nos. 3538 and 3164-A, FE Docket Nos. 12-97-LNG and 12-99-LNG (Oct. 29, 2014; Cheniere Marketing, LLC & Corpus Christi Liquefaction, LLC, DOE/FE Order No. 3638, FE Docket No. 12-97-LNG (May 12, 2015).

Cheniere Marketing, LLC & Corpus Christi Liquefaction, LLC, DOE/FE Order No. 3638, FE Docket No. 12-97-LNG (May 12, 2015) (noting "The Perryman Report and the NERA Study show that the proposed exports are likely to generate net economic benefits for the United States." and "it seems more likely that CMI's ability to export to non-FTA countries will deepen and diversify the market for U.S.-produced natural gas...").

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

⁴ *Id.* at 21.

⁵ *Id.* at 64.

Consistent with 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* support this position: "[t]he market, not the government, should determine the price and other contract terms of imported [and exported] gas," and "the federal government's primary responsibility ... should be to evaluate the need for the gas ..."

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* 2019 demonstrates that the United States has significant natural gas resources available to meet projected future domestic needs.⁸

1. National Supply – Overview

Domestic natural gas production has increased rapidly in recent years as technological innovations have greatly enhanced productivity. Since 2008, U.S. marketed natural gas production has grown approximately 55%, from approximately 21.1 Tcf to about approximately 32.7 Tcf in 2018, representing the highest production levels in U.S. history. The outlook for

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 6, at 14.

⁸ EIA, *Annual Energy Outlook 2019 with Projections to 2050*, (Jan. 24, 2019), *available at* https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf [hereinafter *AEO 2019*].

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 July 23, 2019).

future increases in domestic natural gas supply capacity is robust and is reflected in the *AEO 2019*. The *AEO 2019* found that "[n]atural gas experiences the largest production increase of all fossil fuels during the projection period across all cases...The growth in natural gas production supports increasing domestic consumption, particularly in the industrial and electric power sectors, and higher levels of natural gas exports." Total U.S. dry gas production is projected to be 43.41 Tcf by 2050 in the Reference Case, with a 1.2% annual growth rate between 2018 and 2050. 11

2. National Natural Gas Demand

Production of natural gas is outpacing domestic consumption. In this regard, the United States "became a net natural gas exporter on an annual basis in 2017 and continued to export more natural gas than it imported in 2018.¹² In the *AEO 2019* Reference Case, EIA predicts energy consumption for natural gas to grow at an annual rate of only 0.6% from 2018 to 2050 while, as noted above, total U.S. dry gas production during the same period is projected to increase 1.2% annually.¹³

a. Industrial Sector

Industrial consumption of natural gas is projected to see modest expansion through 2050.¹⁴ The *AEO 2019* Reference Case projects U.S. industrial sector consumption will grow an average of 0.8% annually to total 13.15 Tcf in 2050 from 10.06 Tcf consumed in 2018.¹⁵

b. Residential and Commercial Sectors

EIA forecasts a contraction in future residential consumption of natural gas. U.S. residential natural gas demand is predicted in *AEO 2019* to decline modestly to 4.43 Tcf in 2040

¹¹ *AEO 2019*, *supra* note 8, Appendix A, pg. 27.

¹² AEO 2019, supra note 8, at 13.

¹³ *Id.* Appendix A, pg. 27.

¹⁴ *Id*.

¹⁵ *Id*.

from 4.83 Tcf in 2018.¹⁶ Natural gas use declines in every residential sector key indicator except clothes dryers.¹⁷ Commercial sector natural gas consumption is projected in the *AEO 2019's* Reference Case to experience modest annual growth of 0.5%, reaching 3.92 Tcf in 2050 from 3.29 Tcf in 2018.¹⁸

c. Electricity Sector

Natural gas consumption in the electric generating sector is forecasted in the *AEO 2019* Reference Case to increase by an average of 0.5% per year, expanding to 12.15 Tcf in 2050 from 10.40 Tcf in 2018.¹⁹

d. Transportation Sector

Natural gas consumed for transportation increases but accounts for a small portion of the total domestic gas market.²⁰ The EIA, in its *AEO 2019* Reference Case, forecasts that transportation sector demand will grow 1.8% annually to 1.33 Tcf in 2050 from 0.76 Tcf in 2018.²¹ The use of natural gas by motor vehicles, trains and ships are the vast majority of growth in natural gas consumption in this sector.²²

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

As indicated above, 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. These trends demonstrate that available natural gas reserves exceed current

¹⁷ *Id.* Appendix A, pg. 9.

²⁰ *Id*.

²² *Id*.

¹⁶ *Id*.

¹⁸ *Id.* at Appendix A, pg. 27.

¹⁹ *Id*.

²¹ *Id*.

demand, and that future resources exist 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. *Macroeconomic Impacts*

CMI's Application is further supported by economic projections of the impact on domestic natural gas markets resulting from future LNG exports. DOE/FE has commissioned multiple studies to evaluate the macroeconomic effects of LNG exports on the U.S. economy. Most recently, DOE/FE released the 2018 LNG Export Study.²³ The study concluded that "[i]ncreasing U.S. LNG exports under any given set of assumptions about U.S. natural gas resources and their production leads to only small increases in U.S. natural gas prices."²⁴ The study further concluded that "[a]vailable natural gas resources have the largest impact on natural gas prices. Therefore, U.S. natural gas prices are far more dependent on available resources and technologies to extract available resources than on U.S. policies surrounding LNG exports."²⁵ As discussed above, current projections for natural gas production show that U.S. supply will continue to outpace demand, and therefore the impact on domestic prices from LNG exports should be insignificant. Moreover, the 2018 LNG Export Study concluded that with rising LNG exports, U.S. consumer well-being increases and total economic activity expands.²⁶

²³ 2018 LNG Export Study, supra note 3.

²⁴ *Id.* at 55.

²⁵ *Id*.

Study on Macroeconomic Outcomes of LNG Exports: Response to Comments Received on Study, 83 Fed. Reg. 67,251 (December 28, 2018).

Appendix B

Details of Optimizations

(CUI//PRIV—PRIVILEGED AND CONFIDENTIAL—DO NOT RELEASE)

FILED UNDER SEPARATE COVER

Appendix C OPINION OF COUNSEL



September 27, 2019

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

RE: Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC FE Docket No. 19-__-LNG
Application for Long-Term Authorization to Export LNG

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) (2019). I have examined the Limited Liability Company Agreements of Cheniere Marketing, LLC ("Cheniere Marketing") and Corpus Christi Liquefaction, LLC ("CCL") and other authorities as necessary and have concluded that the proposed exportation of liquefied natural gas is within Cheniere Marketing and CCL's corporate powers.

Respectfully submitted,

By: Sean Markowitz

General Counsel and Corporate Secretary

Cheniere Energy, Inc.

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