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

) )	FE DOCKET NO. 15-67-LNG
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FINAL OPINION AND ORDER GRANTING LONG-TERM, MULTI-CONTRACT AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS BY VESSEL FROM THE CAMERON TERMINAL LOCATED IN CAMERON AND CALCASIEU PARISHES, LOUISIANA, TO NON-FREE TRADE AGREEMENT NATIONS

DOE/FE ORDER NO. 3797

MARCH 18, 2016

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## **FREQUENTLY USED ACRONYMS**

AEO Annual Energy Outlook
Bcf/d Billion Cubic Feet per Day
Bcf/yr Billion Cubic Feet per Year
DOE U.S. Department of Energy
EA Environmental Assessment

EIA U.S. Energy Information Administration

EIS Environmental Impact Statement

EPA U.S. Environmental Protection Agency

FE Office of Fossil Energy, U.S. Department of Energy

FERC Federal Energy Regulatory Commission

FTA Free Trade Agreement
LNG Liquefied Natural Gas
Mcf Thousand Cubic Feet

MMBtu Million British Thermal Units
mtpa Million Metric Tons per Annum
NEPA National Environmental Policy Act

NERA NERA Economic Consulting NGA Natural Gas Act

TVOTI TVALUTAL GAS TICK

VOC Volatile Organic Compound

## I. INTRODUCTION

On April 3, 2015, Cameron LNG, LLC (Cameron LNG) filed an application (Application)<sup>1</sup> with the Office of Fossil Energy of the Department of Energy (DOE/FE) requesting long-term authorization under section 3 of the Natural Gas Act (NGA)<sup>2</sup> to export domestically produced liquefied natural gas (LNG) in a volume equivalent to 152 billion cubic feet per year (Bcf/yr) (or 0.42 Bcf per day (Bcf/d)) of natural gas for a 20-year term commencing on the earlier of the date of first export or seven years from the date the authorization is issued. Cameron LNG seeks authority to export this LNG on its own behalf or as agent for others who hold title to the LNG to any country (i) with which the United States does not have a Free Trade Agreement (FTA) requiring natural treatment for trade in natural gas, (ii) that has or will develop the capacity to import LNG delivered by ocean-going carrier, and (iii) with which trade is not prohibited by U.S. law or policy (non-FTA countries).

The proposed exports would originate from the existing Cameron LNG Terminal (Cameron Terminal) located in Cameron and Calcasieu Parishes, Louisiana. Cameron LNG is constructing and developing natural gas processing and liquefaction facilities (Cameron Project) to receive and liquefy domestic natural gas at the Cameron Terminal. Cameron LNG states that the requested export volumes in this proceeding (152 Bcf/yr of natural gas), when combined with its non-FTA export authorization in DOE/FE Order No. 3391-A (620 Bcf/yr of natural gas), would allow it to export a total volume equal to 772 Bcf/yr of natural gas (14.95 million metric tons per annum of LNG) from Liquefaction Trains 1, 2, and 3 at the Cameron Terminal. This

<sup>&</sup>lt;sup>1</sup> Application of Cameron LNG, LLC for Long-Term Authorization to Export LNG to Non-Free Trade Agreement Countries, FE Docket No. 15-67-LNG (Apr. 3, 2015) [hereinafter Cameron LNG App.].

<sup>&</sup>lt;sup>2</sup> 15 U.S.C. § 717b(a). This authority is delegated to the Assistant Secretary for Fossil Energy pursuant to Redelegation Order No. 00-006.02, issued on November 17, 2014.

<sup>&</sup>lt;sup>3</sup> Cameron LNG, LLC, DOE/FE Order No. 3391-A, DOE/FE Docket No. 11-162-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas From the Cameron LNG Terminal in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations (Sept. 10, 2014).

total volume represents the peak capacity of Trains 1-3 under optimal conditions. Cameron LNG states no physical modifications of the Cameron Project facilities previously approved by the Federal Energy Regulatory Commission (FERC) are required to support the requested authorization, and FERC already has determined that the appropriate measure of the liquefaction capacity of the approved Cameron Project facilities is its peak capacity at optimal conditions.<sup>4</sup>

On August 6, 2015, DOE/FE published a Notice of Cameron LNG's Application in the Federal Register. The Notice of Application called on interested persons to submit protests, motions to intervene, notices of intervention, and comments on the Application by October 5, 2015. In response to the Notice of Application, DOE/FE received four timely filed letters in support of Cameron LNG's Application from the following: Louisiana State Representative Bob Hensgens; S. Mark McMurry, President, McMurry Leadership & Management, LLC; Louisiana State Senator Dan Morrish; and Stephen Broussard, Director of the West Cameron Port Authority. Other timely filings included a motion to intervene by the American Petroleum Institute requesting that DOE/FE grant the Application and Resolution No. 1024 from the Cameron Parish Police Jury in support of Cameron LNG's request. Steven Grissom, Secretary, Louisiana Economic Development, also filed a letter in support of the Application on behalf of the Governor of Louisiana, Bobby Jindal one day out of time (October 6, 2015). DOE/FE received no filings opposing the Application. Consequently, the Application is uncontested.

<sup>&</sup>lt;sup>4</sup> Cameron LNG App. at 6, citing Sabine Pass Liquefaction, LLC, 146 FERC ¶ 61,117 at P 12 (2014).

<sup>&</sup>lt;sup>5</sup> Cameron LNG, LLC, Application for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Nations for a 20-Year Period, 80 Fed. Reg. 46,967 (Aug. 6, 2015) [hereinafter Notice of App.].

## II. BACKGROUND

## A. 2012 LNG Export Study

On May 20, 2011, DOE/FE issued *Sabine Pass Liquefaction*, *LLC*, DOE/FE Order No. 2961 (*Sabine Pass*), conditionally granting a long-term authorization to export liquefied natural gas (LNG) produced in the lower-48 states to non-FTA countries.<sup>6</sup> In that order, DOE/FE conditionally authorized Sabine Pass to export a volume of LNG equivalent to 2.2 Bcf/d of natural gas.

By August 2011, with other non-FTA export applications then pending before it,

DOE/FE determined that further study of the economic impacts of LNG exports was warranted to better inform its public interest review under section 3 of the NGA.<sup>7</sup> Accordingly, DOE/FE engaged the U.S. Energy Information Administration (EIA) and NERA Economic Consulting (NERA) to conduct a two-part study of the economic impacts of LNG exports.<sup>8</sup>

First, in August 2011, DOE/FE requested that EIA assess how prescribed levels of natural gas exports above baseline cases could affect domestic energy markets. Using its National Energy Modeling System (NEMS), EIA examined the impact of two DOE/FE-prescribed levels of assumed natural gas exports (at 6 Bcf/d and 12 Bcf/d) under numerous scenarios and cases based on projections from EIA's 2011 *Annual Energy Outlook* (AEO 2011),

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<sup>&</sup>lt;sup>6</sup> Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961, DOE/FE Docket No. 10-111-LNG, Opinion and Order Conditionally Granting Long-Term Authorization to Export Liquefied Natural Gas From Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations (May 20, 2011) [hereinafter Sabine Pass]. In August 2012, DOE/FE granted final authorization. Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961-A, FE Docket No. 10-111-LNG, Final Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas From Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations (Aug. 7, 2012).

<sup>&</sup>lt;sup>7</sup> DOE/FE stated in *Sabine Pass* that it "will evaluate the cumulative impact of the [Sabine Pass] authorization and any future authorizations for export authority when considering any subsequent application for such authority." DOE/FE Order No. 2961, at 33.

<sup>&</sup>lt;sup>8</sup> See 2012 LNG Export Study, 77 Fed. Reg. 73,627 (Dec. 11, 2012), available at <a href="http://energy.gov/sites/prod/files/2013/04/f0/fr">http://energy.gov/sites/prod/files/2013/04/f0/fr</a> notice two part study.pdf (Federal Register Notice of Availability of the LNG Export Study).

the most recent EIA projections available at the time.<sup>9</sup> The new scenarios and cases examined by EIA included a variety of supply, demand, and price outlooks. EIA published its study, *Effect of Increased Natural Gas Exports on Domestic Energy Markets*, in January 2012.<sup>10</sup> As discussed below, EIA generally found that LNG exports will lead to higher domestic natural gas prices, increased domestic natural gas production, reduced domestic natural gas consumption, and increased natural gas imports from Canada via pipeline.

Second, DOE contracted with NERA to assess the potential macroeconomic impact of LNG exports by incorporating EIA's then-forthcoming case study of output from the NEMS model into NERA's general equilibrium model of the U.S. economy. NERA analyzed the potential macroeconomic impacts of LNG exports under a range of global natural gas supply and demand scenarios, including scenarios with unlimited LNG exports. DOE published the NERA Study, *Macroeconomic Impacts of LNG Exports from the United States*, in December 2012. Among its key findings, 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.

On December 11, 2012, DOE/FE published a Notice of Availability (NOA) of the EIA and NERA studies (collectively, the 2012 LNG Export Study or Study). <sup>13</sup> DOE/FE invited public comment on the Study, and stated that its disposition of the then-pending non-FTA LNG export applications would be informed by the Study and the comments received in response thereto. <sup>14</sup>

<sup>&</sup>lt;sup>9</sup> The Annual Energy Outlook (AEO) presents long-term projections of energy supply, demand, and prices. It is based on results from EIA's NEMS model.

<sup>&</sup>lt;sup>10</sup> See LNG Export Study – Related Documents, available at <a href="http://energy.gov/fe/downloads/lng-export-study-related-documents">http://energy.gov/fe/downloads/lng-export-study-related-documents</a> (EIA Analysis (Study - Part 1)).

<sup>&</sup>lt;sup>11</sup> See id. (NERA Economic Consulting Analysis (Study - Part 2)).

<sup>&</sup>lt;sup>12</sup> See id at 1.

<sup>&</sup>lt;sup>13</sup> 77 Fed. Reg. at 73,627.

<sup>&</sup>lt;sup>14</sup> *Id*. at 73,628.

The NOA required initial comments by January 24, 2013, and reply comments between January 25 and February 25, 2013. DOE/FE received over 188,000 initial comments and over 2,700 reply comments, of which approximately 800 were unique. The comments also included 11 economic studies prepared by commenters or organizations under contract to commenters.

The public comments represent a diverse range of interests and perspectives, including those of federal, state, and local political leaders; large public companies; public interest organizations; academia; industry associations; foreign interests; and thousands of U.S. citizens. While the majority of comments were short letters expressing support or opposition to the 2012 LNG Export Study or to LNG exports in general, others contained detailed statements of differing points of views. The comments were posted on the DOE/FE website and entered into the public records of several non-FTA export proceedings.<sup>17</sup> DOE/FE has carefully examined the comments in a series of non-FTA LNG export decisions<sup>18</sup> and the precedents established in those decisions have been considered in our review of Cameron LNG's Application.

#### B. Environmental Addendum

On June 4, 2014, DOE/FE issued a notice in the *Federal Register* proposing to evaluate different environmental aspects of the LNG production chain. Specifically, DOE/FE announced that it had conducted a review of existing literature on potential environmental issues associated with unconventional gas production in the lower-48 states. The purpose of this review was to

<sup>&</sup>lt;sup>15</sup> *Id.* at 73,627. On January 28, 2013, DOE issued a Procedural Order accepting for filing any initial comments that had been received as of 11:59 p.m., Eastern time, on January 27, 2013.

<sup>&</sup>lt;sup>16</sup> Because many comments were nearly identical form letters, DOE/FE organized the initial comments into 399 docket entries, and the reply comments into 375 entries. *See* 

http://www.fossil.energy.gov/programs/gasregulation/authorizations/export\_study/export\_study\_initial\_comments.html (Initial Comments - LNG Export Study) &

http://www.fossil.energy.gov/programs/gasregulation/authorizations/export\_study/export\_study\_reply\_comments.ht ml (Reply Comments – LNG Export Study).

<sup>&</sup>lt;sup>17</sup> See 77 Fed. Reg. at 73,629.

<sup>&</sup>lt;sup>18</sup> See, e.g. American LNG Marketing LLC, DOE/FE Order No. 3690, at § VIII.

provide additional information to the public concerning the potential environmental impacts of unconventional natural gas exploration and production activities, including hydraulic fracturing. DOE/FE published its draft report for public review and comment, entitled *Draft Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States*. <sup>19</sup> DOE/FE received comments on the Draft Addendum and, on August 15, 2014, issued the final Addendum with its response to the public comments contained in Appendix B. <sup>20</sup>

DOE/FE has taken the Draft Addendum, all public comments on the Draft Addendum, as well as the final Addendum into consideration in earlier non-FTA export decisions and the precedent established by those decisions<sup>21</sup> has been factored into this decision. The Addendum is not required by the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq.*, but DOE/FE believes that it will inform its review of the public interest under NGA section 3(a), and is responsive to concerns previously raised in connection with other non-FTA LNG export proceedings.

## C. DOE/FE's Categorical Exclusion Under NEPA

On March 18, 2016, DOE/FE issued a categorical exclusion from the preparation of an environmental impact statement or environmental assessment under NEPA for the proposed use of the Cameron Terminal (Categorical Exclusion) for the authorization requested in this proceeding.<sup>22</sup> Specifically, DOE/FE applied categorical exclusion B5.7 of DOE/FE's

<sup>&</sup>lt;sup>19</sup> Dep't of Energy, Draft Addendum to Environmental Review Documents Concerning Exports of Natural Gas From the United States, 79 Fed. Reg. 32,258 (June 4, 2014) [hereinafter Draft Addendum]. DOE/FE announced the availability of the Draft Addendum on its website on May 29, 2014.

<sup>&</sup>lt;sup>20</sup> Dep't of Energy, Addendum to Environmental Review Documents Concerning Exports of Natural Gas From the United States, 79 Fed. Reg. 48,132 (Aug. 15, 2014) [hereinafter Addendum].

<sup>&</sup>lt;sup>21</sup> See e.g., American LNG Marketing LLC, DOE/FE Order No. 3690, FE Docket No. 14-209-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas in ISO Containers Loaded at the Proposed Hialeah Facility near Medley, Florida, and Exported by Vessel to Non-Free Trade Agreement Nations (Aug. 7, 2015) at §§ IX and X.

<sup>&</sup>lt;sup>22</sup> U.S. Dep't of Energy, Categorical Exclusion Determination, *Cameron LNG*, *LLC*, DOE/FE Docket No. 15-67-LNG (Mar. 18, 2016) [hereinafter Categorical Exclusion].

regulations (10 C.F.R. Part 1021, Subpart D, Appendix B5). This exclusion applies to natural gas import or export activities requiring minor operational changes to existing projects, but no new construction. This Order grants Cameron LNG's Application, in part, on the basis of this Categorical Exclusion.

## III. SUMMARY OF FINDINGS AND CONCLUSIONS

This Order presents DOE/FE's findings and conclusions on all issues associated with Cameron LNG's proposed exports of LNG in this proceeding, including both environmental and non-environmental issues. See infra § VII. As the basis for this Order, DOE/FE has reviewed a wide variety of material, including but not limited to Cameron LNG's Application, the 2012 LNG Export Study, public comments received on the 2012 LNG Export Study, and the Addendum.

For the reasons set forth below, DOE/FE has determined that it has not been demonstrated that the proposed exports of LNG will be inconsistent with the public interest, as would be required to deny the Application under NGA section 3(a). On this basis, DOE/FE is granting Cameron LNG's Application to export domestically produced LNG from the Cameron Terminal in Cameron and Calcasieu Parishes, Louisiana, to non-FTA countries in a volume equivalent to 152 Bcf/yr of natural gas (0.42 Bcf/d) for a 20-year term. This authorization is subject to the Terms and Conditions and Ordering Paragraphs set forth herein, but is not conditioned on additional environmental analysis or review.

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<sup>&</sup>lt;sup>23</sup> As discussed below, the non-environmental issues primarily include economic and international impacts associated with the proposed exports, as well as security of the natural gas supply in the United States. *See infra* § IV (public interest standard).

## IV. PUBLIC INTEREST STANDARD

Section 3(a) of the NGA sets forth the standard for review of Cameron LNG's Application:

[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<sup>24</sup>] authorizing it to do so. The [Secretary] shall issue such order upon application, unless after opportunity for hearing, [he] 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 part, with such modification and upon such terms and conditions as the [Secretary] may find necessary or appropriate.

15 U.S.C. § 717b(a). This provision creates a rebuttable presumption that a proposed export of natural gas is in the public interest. DOE/FE must grant such an application unless the presumption is rebutted by an affirmative showing of inconsistency with the public interest.<sup>25</sup>

While Section 3(a) establishes a broad public interest standard and a presumption favoring export authorizations, the statute does not define "public interest" or identify criteria that must be considered. 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.

DOE/FE's prior decisions have also looked to certain principles established in its 1984 Policy Guidelines.<sup>26</sup> The goals of the Policy Guidelines are to minimize federal control and

<sup>24</sup> The Secretary's authority was established by the Department of Energy Organization Act, 42 U.S.C. § 7172, which transferred jurisdiction over imports and export authorizations from the Federal Power Commission to the Secretary of Energy.

<sup>&</sup>lt;sup>25</sup> See, e.g., Sabine Pass, Order No. 2961, at 28; Phillips Alaska Natural Gas Corp. & Marathon Oil Co., DOE/FE Order No. 1473, Order Extending Authorization to Export Liquefied Natural Gas from Alaska, at 13 (April 2, 1999), citing Panhandle Producers & Royalty Owners Ass'n v. ERA, 822 F.2d 1105, 1111 (D.C. Cir. 1987).

<sup>&</sup>lt;sup>26</sup> New Policy Guidelines and Delegations Order Relating to Regulation of Imported Natural Gas, 49 Fed. Reg. 6684 (Feb. 22, 1984) [hereinafter 1984 Policy Guidelines].

involvement in energy markets and to promote a balanced and mixed energy resource system.

The Guidelines provide that:

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.<sup>27</sup>

While nominally applicable to natural gas import cases, DOE/FE subsequently held in Order No. 1473 that the same policies should be applied to natural gas export applications.<sup>28</sup>

In Order No. 1473, DOE/FE stated that it was guided by DOE Delegation Order No. 0204-111. That delegation order, which authorized the Administrator of the Economic Regulatory Administration to exercise the agency's review authority under section 3 of the NGA, directed the Administrator to regulate exports "based on a consideration of the domestic need for the gas to be exported and such other matters as the Administrator finds in the circumstances of a particular case to be appropriate." In February 1989, the Assistant Secretary for Fossil Energy assumed the delegated responsibilities of the Administrator of ERA.

Although DOE Delegation Order No. 0204-111 is no longer in effect, DOE/FE's review of export applications has continued to focus 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

<sup>28</sup> *Phillips Alaska Natural Gas*, DOE/FE Order No. 1473, at 14 (citing *Yukon Pacific Corp.*, DOE/FE Order No. 350, Order Granting Authorization to Export Liquefied Natural Gas from Alaska, 1 FE ¶ 70,259, 71,128 (1989)).

<sup>&</sup>lt;sup>27</sup> *Id.* at 6685.

<sup>&</sup>lt;sup>29</sup> DOE Delegation Order No. 0204-111, at 1; see also 49 Fed. Reg. at 6690.

<sup>&</sup>lt;sup>30</sup> See Applications for Authorization to Construct, Operate, or Modify Facilities Used for the Export or Import of Natural Gas, 62 Fed. Reg. 30,435, 30,437 n.15 (June 4, 1997) (citing DOE Delegation Order No. 0204-127, 54 Fed. Reg. 11,436 (Mar. 20, 1989)).

of promoting market competition, and (iv) any other factors bearing on the public interest described herein.

## V. DESCRIPTION OF REQUEST

Cameron LNG requests long-term, multi-contract authorization to export domestically produced LNG, on its own behalf and as agent for other entities that will hold title to the LNG, from the Cameron Terminal to non-FTA countries in a volume equivalent to 152 Bcf/yr of natural gas (0.42 Bcf/d). Cameron LNG requests this authorization for a 20-year term, commencing on the earlier of the date of first export or seven years from the date of this Order. Cameron LNG indicates that the volumes covered by the requested authorization, when combined with volumes authorized for export in Order No. 3391-A, will equal the maximum production capacity of the FERC-approved facilities (772 Bcf/yr or 14.95 MTPA); no modification of those facilities will be required as a consequence of a grant of the requested authorization; and the facilities have already been subjected to an environmental review under NEPA, both by FERC and by DOE in DOE/FE Docket No. 11-162-LNG.

## A. Description of Applicant

Cameron LNG states that it is a limited liability company organized under the laws of Delaware, with its executive offices located in Houston, Texas. Cameron LNG states that it is an indirect subsidiary of Sempra Energy, GDF SUEZ S.A., Mitsui & Co., Ltd, Mitsubishi Corporation, and Nippon Yusen Kabushiki Kaisha. Cameron LNG further states that it owns and operates the existing Cameron Terminal.

#### **B.** Cameron Terminal

Cameron LNG filed an application with FERC on December 7, 2012 seeking authorization to site, construct, and operate liquefaction facilities (Liquefaction Project or

Project) at its existing LNG import terminal to use in the export of domestically produced natural gas. Prior to that filing, FERC commenced its environmental review of the Liquefaction Project, issuing a Notice of Intent to Prepare an Environmental Impact Statement on August 6, 2012.

The Notice of Intent was published in the Federal Register on August 13, 2012. DOE was a cooperating agency in FERC's environmental review of the Project. On January 10, 2014, FERC released a draft Environmental Impact Statement (EIS) and, on April 13, 2014, released a final EIS. The EIS addresses a broad range of potential environmental impacts from the Liquefaction Project as well as the related project to construct an interconnecting natural gas pipeline to serve the Project. The final EIS concludes that the Project will result in mostly temporary and short-term environmental impacts and recommends 76 mitigating conditions. On June 19, 2014, FERC issued an order granting Cameron LNG's request for authorization to site, construct, and operate the Liquefaction Project subject to the 76 mitigating conditions contained in the EIS. 32

## C. Related DOE Authorizations

Cameron LNG holds four DOE authorizations related to its planned export operations, including the following:

FTA Order (DOE/FE Order No. 3059): On January 17, 2012, in Order No. 3059, DOE/FE granted Cameron LNG's request to export domestically produced LNG from the Cameron Terminal to FTA countries on its own behalf and as agent for other entities, in a volume equivalent to 620 Bcf/yr of natural gas for a 20-year term commencing on the earlier of

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<sup>&</sup>lt;sup>31</sup> 77 Fed. Reg. 48,145 (Aug. 13, 2012).

<sup>&</sup>lt;sup>32</sup> Cameron LNG, LLC, and Cameron Interstate Pipeline, LLC., Order Granting Authorization Under Section 3 of the Natural Gas Act and Issuing Certificates, 147 FERC ¶ 61,230 (Jun. 19, 2014), Notice Denying Rehearing, 148 FERC ¶ 61,073 (July 29, 2014), Order Denying Rehearing, 148 FERC ¶ 61,237 (Sept. 26, 2014), appeal taken *sub nom. Sierra Club and Gulf Restoration Network v. FERC* (DC Cir., Case No. 14-1190), dismissed by Court order on March 16, 2015.

the date of first export or seven years from the date the authorization was issued (January 17, 2019). 33

Non-FTA Order (DOE/FE Order No. 3391-A): On September 10, 2014, in Order No. 3391-A, DOE/FE granted Cameron LNG's request to export domestically produced LNG in a volume equivalent to 620 Bcf/yr of natural gas from the existing Cameron Terminal to non-FTA countries.<sup>34</sup> DOE/FE Order Nos. 3059 and 3391-A are not additive to one another.

FTA Order (Increased Volumes) (DOE/FE Order No. 3620): On April 9, 2015, in Order No. 3620, DOE/FE granted Cameron LNG's request for authorization to export domestically produced LNG in an additional volume equivalent to 152 Bcf/yr of natural gas from the existing Cameron Terminal to FTA countries.<sup>35</sup>

FTA Order (Capacity Expansion) (DOE/FE Order No. 3680): On July 10, 2015, in Order No. 3680, DOE/FE granted Cameron LNG's request for authorization to export domestically produced LNG in a volume equivalent to 515 Bcf/yr of natural gas from the existing Cameron Terminal to FTA countries. This additional volume reflected Cameron LNG's construction plans to include two additional liquefaction trains.<sup>36</sup>

#### D. **Business Model**

Cameron LNG requests authorization to export LNG on its own behalf or as agent for others who hold title to the LNG at the point of export. In those instances in which it exports

<sup>33</sup> Cameron LNG, LLC, DOE/FE Order No. 3059, Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Cameron LNG Terminal to Free Trade Agreement Nations (Jan. 17, 2012).

<sup>&</sup>lt;sup>34</sup> See supra n.3.

<sup>35</sup> Cameron LNG, LLC, DOE/FE Order No. 3620, FE Docket No. 14-204-LNG, Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Cameron LNG Terminal in Cameron Parish, Louisiana, to Free Trade Agreement Nations (Apr. 9, 2015).

<sup>&</sup>lt;sup>36</sup> Cameron LNG, LLC, DOE/FE Order No. 3680, FE Docket No. 15-36-LNG, Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Cameron LNG Terminal in Cameron and Calcasieu Parishes, Louisiana, to Free Trade Agreement Nations (July 10, 2015).

LNG on its own behalf, Cameron LNG states that it will either take title to the natural gas at a point upstream of the Cameron Terminal or will purchase LNG from a customer of the Cameron Terminal prior to export. In other cases, Cameron LNG will act as agent for the customers of the Cameron Terminal without taking title. Cameron LNG states that it will comply with all DOE/FE requirements for exporters and agents and that it seeks the same agent authority provided to it in Order No. 3391-A.

## VI. APPLICANT'S PUBLIC INTEREST ANALYSIS

Cameron LNG asserts NGA section 3(a) creates a rebuttable presumption that its proposed exports of natural gas are in the public interest. Cameron LNG further maintains that the export of domestically produced LNG as proposed in its Application satisfies considerations relevant to determining whether the proposed exports are in the public interest. According to Cameron LNG, DOE/FE has repeatedly reaffirmed the continued applicability of its 1984 Policy Guidelines, holding that they apply to export applications, even though originally written to apply to imports. The goals of the Policy Guidelines, according to Cameron LNG, are to minimize federal control and involvement in energy markets and to promote a balanced and diverse energy resource system.

Cameron LNG states DOE/FE's prior decisions have also been guided by DOE

Delegation Order No. 0204-111, which stated that exports of natural gas are to be reviewed

based on a consideration of the domestic need for the natural gas to be exported; whether the

proposed exports pose a threat to the security of domestic natural gas supplies; domestic natural

gas demand; and the impact on domestic natural gas prices. Other factors for consideration cited

by Cameron LNG include whether the exports will be beneficial for regional economies, the

extent to which the exports will foster competition and mitigate trade imbalances with recipient

nations, and the degree to which the exports will encourage efficient management of U.S.

domestic natural resources. Cameron LNG contends that its Application satisfies these standards of evaluation.

## A. Domestic Need for Natural Gas to be Exported

Cameron LNG contends that due to substantial additions to domestic natural gas resources in recent years and comparatively minor increases in natural gas demand, there are more than sufficient natural gas resources to accommodate both domestic demand and the exports proposed in the Application throughout the 20-year term of the requested authorization. Cameron LNG cites an EIA estimate of U.S. natural gas proved reserves from 2013 in claiming that natural gas proved resources in the U.S. increased by 10% in 2013 and reached a high of 354 trillion cubic feet (Tcf).<sup>37</sup>

Cameron LNG further claims that U.S. natural gas prices have fallen significantly as resources and production have increased, while prices for LNG in other major natural gas consuming countries have increased over the past decade. Accordingly, Cameron LNG maintains that domestic natural gas can be liquefied and exported to foreign markets on a competitive basis with only a nominal effect on U.S. prices.

## B. U.S. Natural Gas Supply

Citing the EIA's *Annual Energy Outlook 2014*, <sup>38</sup> Cameron LNG argues domestic natural gas production has been on a significant upward trend in recent years due to the rapid growth in supply from unconventional discoveries, including the Marcellus and Haynesville shales, which have "more than compensated for declines in production from conventional onshore and offshore

<sup>&</sup>lt;sup>37</sup> U.S. Crude Oil and Natural Gas Proved Reserves, 2013 at 10 (Dec. 2014), available at http://www.eia.gov/naturalgas/crudeoilreserves/pdf/uscrudeoil.pdf.

<sup>&</sup>lt;sup>38</sup> Energy Information Administration, *Annual Energy Outlook* 2014.

fields."<sup>39</sup> Cameron LNG further points out that the AEO 2014's projections of increased shale gas production are expected to continue through 2040.<sup>40</sup>

Additionally, Cameron LNG notes that the projections of shale gas production in the AEO 2014 are substantially higher than the projections of the AEO 2011, which DOE/FE considered when granting Cameron LNG authorization to export LNG in Order No. 3391. 41 Cameron LNG states that recent academic and industry evaluations likewise project increasing available natural gas supply and that these studies and reports indicate that the United States has a 90-year to over 100-year inventory of recoverable natural gas resources, which is expected to continue to grow with advancements in drilling technology.

## C. Domestic Natural Gas Demand

Cameron LNG asserts that demand for natural gas has been minimal as it increased only 11 percent from 2000 to 2013. According to Cameron LNG, the consensus of EIA and academic and industry estimates is that the U.S. has between 2,000 and 2,384 Tcf of recoverable natural gas resources. Cameron LNG states that even at 100% utilization, its Liquefaction Project (the combined authorization requested in its Application and in the already-approved Order No. 3391-A) would result in maximum natural gas requirements of 15.44 Tcf over the 20-year term sought to be authorized. Cameron LNG calculates that this represents only 0.64 percent to 0.77 percent of total estimated recoverable domestic natural gas resources over that 20-year term.

<sup>40</sup> *AEO 2014*, supra note 36.

<sup>&</sup>lt;sup>39</sup> Application at 12.

<sup>&</sup>lt;sup>41</sup> See generally AEO 2014; Energy Information Administration, Annual Energy Outlook 2011; DOE/FE Order No. 3391.

## **D.** Impact on Domestic Natural Gas Prices

Citing an October 2014 EIA report analyzing the impacts of increased LNG exports on U.S. energy prices, <sup>42</sup> Cameron LNG projects potential price increases for domestic natural gas at the producer level could range from a 1 to an 18 percent increase between 2015 and 2040. Cameron LNG states that the average delivered domestic natural gas price impact is estimated to range from 1 percent to 9 percent.

Cameron LNG also introduces into the record (as Appendix C to the Application) a report by ICF International (ICF Report) that it commissioned assessing the impact of proposed LNG exports on natural gas prices.<sup>43</sup> Cameron LNG asserts that the ICF Report projects the price at Henry Hub will increase less than an average of \$0.03 per MMBtu between 2016 and 2038, the period in which Cameron LNG will be exporting the 152 Bcf/yr covered in the Application.

#### E. Economic Assessment

Cameron LNG refers to an Economic Impact Assessment (Economic Assessment) that it introduced into the record in DOE/FE Docket No. 11-62-LNG (resulting in Order Nos. 3391 and 3391-A). The Economic Assessment projected substantial public benefits will result from the Liquefaction Project. Cameron LNG submits that those same benefits will result from a grant of the Application in this proceeding as well. Accordingly, Cameron LNG incorporates by reference the Economic Assessment in this proceeding.

## F. Other Public Interest Benefits

Cameron LNG maintains that the ICF Report finds that exports of the incremental volumes requested in its Application will substantially benefit national, regional, and local

<sup>42</sup> Energy Information Association, Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets, available at http://www.eia.gov/analysis/requests/fe/pdf/lng.pdf.

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<sup>&</sup>lt;sup>43</sup> Economic Impacts of Cameron Liquefaction Trains 1-3 Supplemental Volumes: Information for DOE Non-FTA Permit Application (Mar. 9, 2015), attached to Application at Appendix C.

economies and improve the U.S. balance of trade. According to the ICF Report, the incremental export volume of 152 Bcf/yr will result in: (i) increased production of natural gas and liquids (including lease condensate, ethane, propane, butane, and pentanes plus); (ii) increased production values, *i.e.* "[c]umulative natural gas and liquids production value totals \$49.6 billion higher than the base case between 2016 and 2038, or nearly \$2.2 billion annually over the period" (iii) increased upstream capital expenditures to meet LNG export demand of \$6.75 billion (approximately \$290 million annually) from 2016 to 2038; (iv) slightly decreased U.S. domestic natural gas consumption largely attributable to decreased volumes of natural gas used for power generation; (v) increased U.S. employment, especially in Louisiana; (vi) federal, state, and local government revenue increases from taxes of more than \$1.3 billion annually between 2016 and 2038; (vii) a \$3.9 billion average annual increase to the U.S. gross domestic product; and (viii) a U.S. trade deficit average annual decrease of \$1.6 billion.

Cameron LNG also incorporates by reference the public interest analysis in Order Nos. 3391 and 3391-A which, it states, was based on information in the 2012 LNG Export Study. 45

#### VII. DISCUSSION AND CONCLUSIONS

In reviewing Cameron LNG's Application, DOE/FE has considered both its obligation under NGA section 3(a) to ensure that the proposed exports of LNG are not inconsistent with the public interest and its obligations under NEPA. To accomplish these purposes, DOE/FE has examined information addressing non-environmental and environmental factors, including:

- Cameron LNG's Application;
- The 2012 LNG Export Study, including comments received in response to the Study; and

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<sup>&</sup>lt;sup>44</sup> Application at 19.

<sup>45 2012</sup> LNG Export Study, 77 Fed. Reg. 73,627 (Dec. 11, 2012), available at http://energy.gov/sites/prod/files/2013/04/f0/fr\_notice\_two\_part\_study.pdf.

• The Draft Addendum, comments received in response to the Draft Addendum, and the final Addendum.

We also take administrative notice of EIA's most recent authoritative supply data and projections, set forth in AEO 2015, as discussed below.

To avoid repetition, the following discussion focuses on arguments and evidence presented by Cameron LNG to the extent that DOE/FE has not already addressed the same or substantially similar arguments in its responses to comments on the 2012 LNG Export Study or the Addendum.

#### A. Non-Environmental Issues

## 1. Cameron LNG's Application

Upon review, we find that several factors identified in the Application, including the analyses performed in DOE/FE Docket No. 11-162-LNG (which have been incorporated by reference in this record) support a grant of the authorization to export LNG in an amount equivalent to 0.42 Bcf/d of natural gas.

First, the record supports a finding that that there are ample supplies of natural gas available to support the exports contemplated in the Application without affecting the availability of natural gas to meet domestic demand.

Second, as further discussed below, the record demonstrates that domestic natural gas can be liquefied and exported to foreign markets in the volumes proposed in the Application with only a nominal effect on U.S. prices due to the proposed exports.

Third, we agree with Cameron LNG that substantial economic and public benefits, including reductions to the U.S. trade deficit and the generation of significant tax revenues for federal, state, and local governmental entities will follow from a grant of the Application in this proceeding.

## 2. Price Impacts

The 2012 LNG Export Study projected the economic impacts of LNG exports in a range of scenarios, including scenarios that equaled and exceeded the current amount of long-term LNG exports authorized in the final long-term non-FTA export authorizations issued to date, including the export of LNG authorized in this Order (equivalent to a total of 11.80 Bcf/d of natural gas). The 2012 LNG Export Study concluded that LNG exports at these levels (*e.g.*, 6 Bcf/d of natural gas and higher) would result in higher U.S. natural gas prices, but that these price changes would remain in a relatively narrow range across the scenarios studied. NERA's analysis indicates that, after five years of increasing LNG exports, wellhead natural gas price increases could range from \$0.22 to \$1.11 (2010\$/Mcf) depending on the market-determined level of exports. However, even with these estimated price increases, NERA found that the United States would experience net economic benefits from increased LNG exports in all cases studied.

## 3. Significance of the 2012 LNG Export Study

For the reasons discussed above, DOE/FE commissioned the 2012 LNG Export Study and invited the submission of responsive comments. DOE/FE has analyzed this material and determined that the 2012 LNG Export Study provides substantial support for granting Cameron LNG's Application. The conclusion of the 2012 LNG Export Study is that the United States will experience net economic benefits from issuance of authorizations to export domestically produced LNG.

We have evaluated the initial and reply comments submitted in response to the 2012 LNG Export Study. Various commenters have criticized the data used as inputs to the 2012 LNG Export Study and numerous aspects of the models, assumptions, and design of the Study.

However, on April 14, 2015, EIA issued its most recent update, the Annual Energy Outlook 2015 (AEO 2015), with projections to 2040. EIA's projections in AEO 2015 continue to show market conditions that will accommodate increased exports of natural gas. When compared to the AEO 2013 Reference Case, the AEO 2015 Reference Case projects increases in domestic natural gas production—well in excess of what is required to meet projected increases in domestic consumption. Accordingly, we find that the 2012 LNG Export Study is fundamentally sound and supports the proposition that the proposed authorization will not be inconsistent with the public interest.

#### 4. Benefits of International Trade

We have not limited our review to the contents of the 2012 LNG Export Study and the current data from AEO 2015 but have considered a wide range of other information. For example, the National Export Initiative, established by Executive Order, sets an Administration goal to "improve conditions that directly affect the private sector's ability to export" and to "enhance and coordinate Federal efforts to facilitate the creation of jobs in the United States through the promotion of exports."

We have also considered the international consequences of our decision. We review applications to export LNG to non-FTA nations under section 3(a) of the NGA. The United States' commitment to free trade is one factor bearing on that review. An efficient, transparent international market for natural gas with diverse sources of supply provides both economic and strategic benefits to the United States and our allies. Indeed, increased production of domestic natural gas has significantly reduced the need for the United States to import LNG. In global

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<sup>&</sup>lt;sup>46</sup> U.S. Energy Information Administration, *Annual Energy Outlook 2015* (April 14, 2015), *available at* <a href="http://www.eia.gov/forecasts/aeo/">http://www.eia.gov/forecasts/aeo/</a> [hereinafter AEO 2015].

<sup>&</sup>lt;sup>47</sup> National Export Initiative, 75 Fed. Reg. 12,433 (Mar. 16, 2010).

trade, LNG shipments that would have been destined to U.S. markets have been redirected to Europe and Asia, improving energy security for many of our key trading partners. To the extent U.S. exports can diversify global LNG supplies, and increase the volumes of LNG available globally, it will improve energy security for many U.S. allies and trading partners. As such, authorizing U.S. exports may advance the public interest for reasons that are distinct from and additional to the economic benefits identified in the 2012 LNG Export Study.

## B. Environmental Issues—Issuance of a Categorical Exclusion

In reviewing the potential environmental impacts of Cameron LNG's proposal to export LNG, DOE/FE has considered its obligations under NEPA and its separate obligation under NGA section 3(a) to ensure that the proposal is not inconsistent with the public interest. In this proceeding, Cameron LNG proposes to make optimal use of facilities that have already been approved and fully evaluated under NEPA. Cameron LNG does not propose to make any further additions or modifications to those approved facilities as a consequence of the action taken in this proceeding.

The Department's regulations at 10 C.F.R. Part 1021, Subpart D, Appendix B, list categorical exclusions that apply to DOE actions. Item B5.7 provides a categorical exclusion where approvals or disapprovals of authorizations to import or export natural gas under NGA section 3 involve minor operational changes, but not new construction. Approval of Cameron LNG's requested authorization to export LNG from the Cameron Terminal falls within the scope of the B5.7 categorical exclusion because the Application will not require additional construction beyond that previously authorized or modification of the approved facilities. Accordingly, on March 18, 2016, DOE/FE issued a Categorical Exclusion Determination applying a categorical exclusion under NEPA for the current Application.

The issuance of the Categorical Exclusion supports a determination that no further environmental review of Cameron LNG's Application is required under NEPA. The fact that no interventions or comments have been submitted in this proceeding raising environmental concerns associated with the proposed exports, while not determinative, is further support for favorable action in this proceeding. In light of the issuance of the Categorical Exclusion, we find that no environmental conditions need to be imposed on this authorization.

## C. Environmental Impacts Associated with Induced Production of Natural Gas

The current rapid development of natural gas resources in the United States likely will continue, with or without the export of natural gas to non-FTA nations. As Nevertheless, a decision by DOE/FE to authorize exports to non-FTA nations could accelerate that development by some increment. For this reason, DOE/FE prepared and received public comment on the Addendum. The Addendum reviewed the academic and technical literature covering the most significant issues associated with unconventional natural gas production, including impacts to water resources, air quality, greenhouse gas emissions, induced seismicity, and land use.

The Addendum shows that there are potential environmental issues associated with unconventional natural gas production that need to be carefully managed, especially with respect to emissions of volatile organic compounds (VOCs) and methane, and the potential for groundwater contamination. These environmental concerns do not lead us to conclude, however, that exports of natural gas to non-FTA nations should be prohibited. Rather, we believe the public interest is better served by addressing these environmental concerns directly—through federal, state, or local regulation, or through self-imposed industry guidelines where appropriate—rather than by prohibiting exports of natural gas. Unlike DOE, environmental

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<sup>&</sup>lt;sup>48</sup> Addendum at 2.

regulators have the legal authority to impose requirements on natural gas production that appropriately balance benefits and burdens, and to update these regulations from time to time as technological practices and scientific understanding evolve. For example, in 2012, using its authority under the Clean Air Act, EPA promulgated regulations for hydraulically fractured wells that are expected to yield significant emissions reductions. <sup>49</sup> In 2013, EPA updated those regulations to include storage tanks, <sup>50</sup> and in 2014 EPA issued a series of technical white papers exploring the potential need for additional measures to address methane emissions from the oil and gas sector. <sup>51</sup> More recently, in January 2015, EPA announced a strategy for "address[ing] methane and smog-forming VOC emissions from the oil and gas industry in order to ensure continued, safe and responsible growth in U.S. oil and natural gas production." <sup>52</sup> Specifically, as part of the Administration's efforts to address climate change, EPA has initiated a rulemaking to set standards for methane and VOC emissions from new and modified oil and gas production sources, and natural gas processing and transmission sources. <sup>53</sup> EPA issued the proposed rule in September 2015, with a final rule expected to follow in 2016. <sup>54</sup>

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 <sup>&</sup>lt;sup>49</sup> U.S. Envtl. Prot. Agency, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews; Final Rule, 77 Fed. Reg. 49,490 (Aug. 16, 2012).
 <sup>50</sup> U.S. Envtl. Prot. Agency, Oil and Natural Gas Sector: Reconsideration of Certain Provisions of New Source Performance Standards; Final Rule, 77 Fed. Reg. 58,416 (Sept. 23, 2013).

U.S. Envtl. Prot. Agency, Office of Air Quality Planning & Standards, White Papers on Methane and VOC Emissions, available at http://www3.epa.gov/airquality/oilandgas/methane.html (released April 15, 2014).
 U.S. Envtl. Prot. Agency, Fact Sheet: EPA's Strategy for Reducing Methane and Ozone-Forming Pollution From the Oil and Natural Gas Industry (Jan. 14, 2015), available at http://www.epa.gov/airquality/oilandgas/pdfs/20150114fs.pdf.

<sup>&</sup>lt;sup>53</sup> The White House, Office of the Press Secretary, Fact Sheet: Administration Takes Steps Forward on Climate Action Plan by Announcing Actions to Cut Methane Emissions (Jan. 14, 2015), *available at* <a href="https://www.whitehouse.gov/the-press-office/2015/01/14/fact-sheet-administration-takes-steps-forward-climate-action-plan-anno-1">https://www.whitehouse.gov/the-press-office/2015/01/14/fact-sheet-administration-takes-steps-forward-climate-action-plan-anno-1</a> (stating that, in developing the proposed and final standards, EPA "will focus on in-use technologies, current industry practices, [and] emerging innovations ... to ensure that emissions reductions can be achieved as oil and gas production and operations continue to grow.").

<sup>&</sup>lt;sup>54</sup> See U.S. Environmental Protection Agency, Oil and Natural Gas Sector: Emission Standards for New and Modified Sources, Proposed Rule, 80 Fed. Reg. 56,593 (Sept. 18, 2015). EPA subsequently extended the public comment period on this proposed rule and two related proposed rules until December 4, 2015. See 80 Fed. Reg. 70,719 (Nov. 13, 2015).

Section 3(a) of the NGA is too blunt an instrument to address these environmental concerns efficiently. A decision to prohibit exports of natural gas would cause the United States to forego entirely the economic and international benefits discussed herein, but would have little more than a modest, incremental impact on the environmental issues raised by commenters to the 2012 LNG Export Study. For these reasons, we conclude that the environmental concerns associated with natural gas production do not establish that exports of natural gas to non-FTA nations are inconsistent with the public interest.

#### **D.** Other Considerations

Our decision is not premised on an uncritical acceptance of the general conclusion of the 2012 LNG Export Study of net economic benefits from exports of LNG. Both the 2012 LNG Export Study and many public comments identify significant uncertainties and even potential negative impacts from such exports. The economic impacts of higher natural gas prices and potential increases in natural gas price volatility are two of the factors that we view most seriously. Yet we also have taken into account factors that could mitigate such impacts, such as the current oversupply situation and data indicating that the natural gas industry would increase natural gas supply in response to increasing exports. Further, we note that it is far from certain that all or even most of the proposed LNG export projects will ever be realized because of the time, difficulty, and expense of commercializing, financing, and constructing such projects, as well as the uncertainties inherent in the global market demand for LNG.

More generally, DOE/FE continues to subscribe to the principle set forth in our 1984 Policy Guidelines<sup>55</sup> that, under most circumstances, the market is the most efficient means of allocating natural gas supplies. However, we recognize that agency intervention may be

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<sup>&</sup>lt;sup>55</sup> 49 Fed. Reg. at 6684.

necessary to protect the public in the event there is insufficient domestic natural gas for domestic use. There may be other circumstances as well that cannot be foreseen that would require agency action. <sup>56</sup> Given these possibilities, DOE/FE recognizes the need to monitor market developments closely as the impact of successive authorizations of LNG exports unfolds.

## E. Conclusion

We have reviewed the evidence in the record and relevant precedent in earlier non-FTA export decisions and have not found an adequate basis to conclude that Cameron LNG's proposed exports of LNG to non-FTA countries will be inconsistent with the public interest. For that reason, we are authorizing Cameron LNG's proposed exports to non-FTA countries subject to the limitations and conditions described in this Order.

In deciding whether to grant a final non-FTA export authorization, we consider in our decision-making the cumulative impacts of the total volume of all final non-FTA export authorizations. With the issuance of this Order, DOE/FE has now issued final non-FTA authorizations in a cumulative volume of exports totaling 11.80 Bcf/d of natural gas, or 4.31 trillion cubic feet per year, for the 16 final authorizations issued to date—Sabine Pass Liquefaction, LLC (Trains 1-4) (2.2 Bcf/d), <sup>57</sup> Carib Energy (USA) LLC (0.04 Bcf/d), <sup>58</sup> Cameron

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<sup>&</sup>lt;sup>56</sup> Some commenters on the 2012 LNG Export Study asked DOE to clarify the circumstances under which the agency would exercise its authority to revoke (in whole or in part) previously issued LNG export authorizations. We cannot precisely identify all the circumstances under which such action would be taken. We reiterate our observation in *Sabine Pass* that: "In the event of any unforeseen developments of such significant consequence as to put the public interest at risk, DOE/FE is fully authorized to take action as necessary to protect the public interest. Specifically, DOE/FE is authorized by section 3(a) of the Natural Gas Act … to make a supplemental order as necessary or appropriate to protect the public interest. Additionally, DOE is authorized by section 16 of the Natural Gas Act 'to perform any and all acts and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate' to carry out its responsibilities." *Sabine Pass*, DOE/FE Order No. 2961, at 33 n.45 (quoting 15 U.S.C. § 717o).

<sup>&</sup>lt;sup>57</sup> Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961-A, FE Docket No. 10-111-LNG, Final Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas From Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations (Aug. 7, 2012).

<sup>&</sup>lt;sup>58</sup> Carib Energy (USA) LLC, DOE/FE Order No. 3487, FE Docket No. 11-141-LNG, Final Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas in ISO Containers by Vessel to Non-Free Trade Agreement Nations in Central America, South America, or the Caribbean (Sept. 10, 2014).

LNG, LLC (1.7 Bcf/d),<sup>59</sup> FLEX I (1.4 Bcf/d),<sup>60</sup> FLEX II (0.4 Bcf/d),<sup>61</sup> Dominion Cove Point LNG, LP (0.77 Bcf/d),<sup>62</sup> Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC (2.1 Bcf/d),<sup>63</sup> Sabine Pass Liquefaction, LLC Expansion Project (1.38 Bcf/d),<sup>64</sup> American Marketing LLC (0.008 Bcf/d),<sup>65</sup> Emera CNG, LLC (0.008 Bcf/d),<sup>66</sup> Floridian Natural Gas Storage Company, LLC,<sup>67</sup> Air Flow North American Corp. (0.002 Bcf/d),<sup>68</sup> Bear Head LNG Corporation

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<sup>&</sup>lt;sup>59</sup> Cameron LNG, LLC, DOE/FE Order No. 3391-A, FE Docket No. 11-162-LNG, Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Cameron LNG Terminal in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations (Sept. 10, 2014).

<sup>&</sup>lt;sup>60</sup> Freeport LNG Expansion, L.P., et al., DOE/FE Order No. 3282-C, FE Docket No. 10-161-LNG, 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 (Nov. 14, 2014) (FLEX I Final Order).

<sup>&</sup>lt;sup>61</sup> Freeport LNG Expansion, L.P., et al., DOE/FE Order No. 3357-B, FE Docket No. 11-161-LNG, 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 (Nov. 14, 2014) (FLEX II Final Order).

<sup>&</sup>lt;sup>62</sup> Dominion Cove Point LNG, LP, DOE/FE Order No. 3331-A, FE Docket No. 11-128-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas from the Cove Point LNG Terminal in Calvert County, Maryland, to Non-Free Trade Agreement Nations (May 7, 2015).

<sup>&</sup>lt;sup>63</sup> Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC, DOE/FE Order No. 3638, FE Docket No. 12-97-LNG, Final Order and Opinion Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Proposed Corpus Christi Liquefaction Project to Be Located in Corpus Christi, Texas, to Non-Free Trade Agreement Nations (May 12, 2015).

<sup>&</sup>lt;sup>64</sup> Sabine Pass Liquefaction, LLC, DOE/FE Order No. 3669, FE Docket Nos. 13-30-LNG, 13-42-LNG, & 13-121-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Sabine Pass LNG Terminal Located in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations (June 26, 2015).

<sup>&</sup>lt;sup>65</sup> American LNG Marketing LLC, DOE/FE Order No. 3690, FE Docket No. 14-209-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas in ISO Containers Loaded at the Proposed Hialeah Facility Near Medley, Florida, and Exported by Vessel to Non-Free Trade Agreement Nations (Aug. 7, 2015).

<sup>&</sup>lt;sup>66</sup>Emera CNG, LLC, DOE/FE Order No. 3727, FE Docket No. 13-157-CNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Compressed Natural Gas by Vessel From a Proposed CNG Compression and Loading Facility at the Port of Palm Beach, Florida, to Non-Free Trade Agreement Nations (Oct. 19, 2015).

<sup>&</sup>lt;sup>67</sup> Floridian Natural Gas Storage Co., LLC, DOE/FE Order No. 3744, FE Docket No. 15-38-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas in ISO Containers Loaded at the Proposed Floridian Facility in Martin County, Florida, and Exported by Vessel to Non-Free Trade Agreement Nations (Nov. 25, 2015).

<sup>&</sup>lt;sup>68</sup> Air Flow North American Corp., DOE/FE Order No. 3753, FE Docket No. 15-206-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas in ISO Containers Loaded at the Clean Energy Fuels Corp. LNG Production Facility in Willis, Texas, and Exported by Vessel to Non-Free Trade Agreement Nations in Central America, South America, the Caribbean, or Africa (Dec. 4, 2015).

and Bear Head LNG (USA), LLC (0.81 Bcf/d), <sup>69</sup> Pieridae Energy (USA) Ltd., <sup>70</sup> Sabine Pass Liquefaction, LLC (0.56 Bcf/d), <sup>71</sup> and this Order (0.42 Bcf/d). We note that the volumes authorized for export in the *Carib* and *Floridian* orders are both 14.6 Bcf/yr of natural gas (0.04 Bcf/d), yet are not additive to one another because the source of LNG approved under both orders is from the Floridian Facility. <sup>72</sup> Likewise, the volumes authorized for export in the Bear Head and Pieridae US orders are not additive; together, they are limited to a maximum of 0.81 Bcf/d to reflect the current capacity of the Maritimes Northeast Pipeline at the U.S.-Canadian border. <sup>73</sup> In sum, the total export volume is within the range of scenarios analyzed in the 2012 EIA and NERA studies. NERA found that in all such scenarios—assuming either 6 Bcf/d or 12 Bcf/d of export volumes—the United States would experience net economic benefits.

DOE/FE will continue taking a measured approach in reviewing the other pending applications to export natural gas to non-FTA countries. Specifically, DOE/FE will continue to assess the cumulative impacts of each succeeding request for export authorization on the public interest with due regard to the effect on domestic natural gas supply and demand fundamentals. In keeping with the performance of its statutory responsibilities, DOE/FE will attach appropriate

<sup>&</sup>lt;sup>69</sup> Bear Head LNG Corporation and Bear Head LNG (USA), DOE/FE Order No. 3770, FE Docket No. 15-33-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export U.S.-Sourced Natural Gas by Pipeline to Canada for Liquefaction and Re-Export in the Form of Liquefied Natural Gas to Non-Free Trade Agreement Countries (Feb. 5, 2016).

<sup>&</sup>lt;sup>70</sup> Pieridae Energy (USA) Ltd., DOE/FE Order No. 3768, FE Docket No. 14-179-LNG, Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export U.S.-Sourced Natural Gas Natural Gas by Pipeline to Canada for Liquefaction and Re-Export in the Form of Liquefied Natural Gas to Non-Free Trade Agreement Countries (Feb. 5, 2016).

<sup>&</sup>lt;sup>71</sup> Sabine Pass Liquefaction, LLC, DOE/FE Order No. 3792, FE Docket No. 15-63-LNG, Final Opinion and Order Granting Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel From the Sabine Pass LNG Terminal Located in Cameron Parish, Louisiana, to Non-Free Trade Agreement Nations (Mar. 11, 2016). <sup>72</sup> See id. at 22 (stating that the quantity of LNG authorized for export by Floridian in DOE/FE Order No. 3744 "will be reduced by the portion of the total approved volume of 14.6 Bcf/yr that is under firm contract directly or indirectly to Carib Energy (USA), LLC"); see also id. at 21 (Floridian "may not treat the volumes authorized for export in the [Carib and Floridian] proceedings as additive to one another").

<sup>&</sup>lt;sup>73</sup> See Bear Head LNG Corporation and Bear Head LNG (USA), DOE/FE Order No. 3770, at 178 (stating that the quantity of LNG authorized for export by Bear Head LNG and Pieridae US "are not additive; together, they are limited to a maximum of 0.81 Bcf/d to reflect the current capacity of the M&N US Pipeline).

and necessary terms and conditions to authorizations to ensure that the authorizations are utilized in a timely manner and that authorizations are not issued except where the applicant can show that there are or will be facilities capable of handling the proposed export volumes and existing and forecast supplies that support that action. Other conditions will be applied as necessary.

The reasons in support of proceeding cautiously are several: (1) the 2012 LNG Export Study, like any study based on assumptions and economic projections, is inherently limited in its predictive accuracy; (2) applications to export significant quantities of domestically produced LNG are a new phenomenon with uncertain impacts; and (3) the market for natural gas has experienced rapid reversals in the past and is again changing rapidly due to economic, technological, and regulatory developments. The market of the future very likely will not resemble the market of today. In recognition of these factors, DOE/FE intends to monitor developments that could tend to undermine the public interest in grants of successive applications for exports of domestically produced LNG and, as previously stated, to attach terms and conditions to the authorization in this proceeding and to succeeding LNG export authorizations as are necessary for protection of the public interest.

## VIII. TERMS AND CONDITIONS

To ensure that the authorization issued by this Order is not inconsistent with the public interest, DOE/FE has attached the following terms and conditions to the authorization. The reasons for each term or condition are explained below. Cameron LNG must abide by each Term and Condition or may face rescission of its authorization or other appropriate sanction.

## A. Term of Authorization

Cameron LNG requests a 20-year term for the authorization commencing from the date export operations begin. This term is consistent with our practice in the final and conditional

non-FTA export authorizations issued to date.<sup>74</sup> In imposing this condition, we are mindful that LNG export facilities are capital intensive and that, to obtain financing for such projects, there must be a reasonable expectation that the authorization will continue for a term sufficient to support repayment. We find that a 20-year term is likely sufficient to achieve this result.

Accordingly, the 20-year term will begin on the date when Cameron LNG commences commercial export of domestically sourced LNG from the Cameron Terminal, but not before.

## **B.** Commencement of Operations Within Seven Years

Cameron LNG requested this authorization to commence on the earlier of the date of first export or seven years from the date of the issuance of this Order. Consistent with the final and conditional non-FTA authorizations issued to date, 75 DOE/FE will add as a condition of the authorization that Cameron LNG must commence commercial LNG export operations no later than seven years from the date of issuance of this Order. The purpose of this condition is to ensure that other entities that may seek similar authorizations are not frustrated in their efforts to obtain those authorizations by authorization holders that are not engaged in actual export operations.

## **C.** Commissioning Volumes

Cameron LNG will be permitted to apply for short-term export authorizations to export

Commissioning Volumes prior to the commencement of the first commercial exports of

domestically sourced LNG from the Cameron Terminal. "Commissioning Volumes" are defined

as the volume of LNG produced and exported under a short-term authorization during the initial

start-up of each LNG train, before each LNG train has reached its full steady-state capacity and

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<sup>&</sup>lt;sup>74</sup> See, e.g., Freeport LNG Expansion, L.P., et al., DOE/FE Order No. 3357-B, at 100-01.

<sup>&</sup>lt;sup>75</sup> See, e.g., Freeport LNG Expansion, L.P., et al., DOE/FE Order No. 3357-B, at 100-01.

begun its commercial exports pursuant to Cameron LNG's long-term contracts. <sup>76</sup> The Commissioning Volumes will not be counted against the maximum level of volumes previously authorized in any of Cameron LNG's blanket short-term or long-term FTA and non-FTA authorizations, including this Order.

## D. Make-Up Period

Cameron LNG will be permitted to continue exporting for a total of three years following the end of the 20-year term established in this Order, solely to export any Make-Up Volume that it was unable to export during the original export period. The three-year term during which the Make-Up Volume may be exported shall be known as the "Make-Up Period."

The Make-Up Period does not affect or modify the total volume of LNG previously authorized in any of Cameron LNG's FTA and non-FTA orders, including this Order. Insofar as Cameron LNG may seek to export additional volumes not previously authorized for export, it will be required to obtain appropriate authorization from DOE/FE.

#### Transfer, Assignment, or Change in Control E.

DOE/FE's natural gas import/export regulations prohibit authorization holders from transferring or assigning authorizations to import or export natural gas without specific authorization by the Assistant Secretary for Fossil Energy. 77 As a condition of the similar authorization issued to Sabine Pass in DOE/FE Order No. 2961, DOE/FE found that the requirement for prior approval by the Assistant Secretary under its regulations applies to any change of effective control of the authorization holder either through asset sale or stock transfer or by other means. This condition was deemed necessary to ensure that, prior to any transfer or

<sup>77</sup> 10 C.F.R. § 590.405.

<sup>&</sup>lt;sup>76</sup> For additional discussion of Commissioning Volumes and the Make-Up Period referenced below, see *Freeport* LNG Expansion, L.P., et al., DOE/FE Order Nos. 3282-B & 3357-A, Order Amending DOE/FE Order Nos. 3282 and 3357, FE Docket Nos. 10-161-LNG & 11-161-LNG, at 4-9 (June 6, 2014).

change in control, DOE/FE will be given an adequate opportunity to assess the public interest impacts of such a transfer or change.

DOE/FE construes a change in control to mean a change, directly or indirectly, of the power to direct the management or policies of an entity whether such power is exercised through one or more intermediary companies or pursuant to an agreement, written or oral, and whether such power is established through ownership or voting of securities, or common directors, officers, or stockholders, or voting trusts, holding trusts, or debt holdings, or contract, or any other direct or indirect means. A rebuttable presumption that control exists will arise from the ownership or the power to vote, directly or indirectly, 10 percent or more of the voting securities of such entity.

## F. Agency Rights

Cameron LNG requests authorization to export LNG in a volume equivalent to 0.42 Bcf/d on its own behalf and as agent for other entities that hold title to the LNG at the time of export, pursuant to long-term sales and purchase agreements with Cameron LNG. DOE/FE previously addressed the issue of Agency Rights in Order No. 2913, which granted Freeport LNG Expansion, L.P., *et al.* (FLEX) authority to export LNG to FTA countries. In that order, DOE/FE approved a proposal by FLEX to register each LNG title holder for whom FLEX sought to export LNG as agent. DOE/FE found that this proposal was an acceptable alternative to the non-binding policy adopted by DOE/FE in *Dow Chemical*, which established that the title for all LNG authorized for export must be held by the authorization holder at the point of export. We

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<sup>&</sup>lt;sup>78</sup> Freeport LNG Expansion, L.P., et al., DOE/FE Order No. 2913, FE Docket No. 10-160-LNG, Order Granting Long-Term Authorization to Export Liquefied Natural Gas from Freeport LNG Terminal to Free Trade Nations (Feb. 10, 2011) [hereinafter *Freeport LNG*].

<sup>&</sup>lt;sup>79</sup> *Dow Chem. Co.*, DOE/FE Order No. 2859, FE Docket No. 10-57-LNG, Order Granting Blanket Authorization to Export Liquefied Natural Gas, at 7-8 (Oct. 5, 2010), *discussed in Freeport LNG*, DOE/FE Order No. 2913, at 7-8.

find that the same policy considerations that supported DOE/FE's acceptance of the alternative registration proposal in Order No. 2913 apply here as well. DOE/FE reiterated its policy on Agency Rights procedures in *Gulf Coast LNG Export, LLC*. 80 In *Gulf Coast*, DOE/FE confirmed that, in LNG export orders in which Agency Rights have been granted, DOE/FE shall require registration materials filed for, or by, an LNG title-holder (Registrant) to include the same company identification information and long-term contract information of the Registrant as if the Registrant had filed an application to export LNG on its own behalf. 81

To ensure that the public interest is served, the authorization granted herein shall be conditioned to require that where Cameron LNG proposes to export LNG as agent for other entities that hold title to the LNG (Registrants), it must register with DOE/FE those entities on whose behalf it will export LNG in accordance with the procedures and requirements described herein.

## G. Contract Provisions for the Sale or Transfer of LNG to be Exported

DOE/FE's regulations require applicants to supply transaction-specific factual information "to the extent practicable." Additionally, DOE/FE regulations allow confidential treatment of the information supplied in support of or in opposition to an application if the submitting party requests such treatment, shows why the information should be exempted from public disclosure, and DOE/FE determines it will be afforded confidential treatment in accordance with 10 C.F.R. § 1004.11.83

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<sup>&</sup>lt;sup>80</sup> *Gulf Coast LNG Export, LLC*, DOE/FE Order No. 3163, FE Docket No. 12-05-LNG, Order Granting Long-Term Multi-Contract Authority to Export LNG by Vessel from the Proposed Brownsville Terminal to Free Trade Agreement Nations (Oct. 16, 2012).

<sup>&</sup>lt;sup>81</sup> See id. at 7-8.

<sup>82 10</sup> C.F.R. § 590.202(b).

<sup>&</sup>lt;sup>83</sup> *Id.* § 590.202(e).

DOE/FE will require that Cameron LNG file or cause to be filed with DOE/FE any relevant long-term commercial agreements, including liquefaction tolling agreements, pursuant to which Cameron LNG exports LNG as agent for a Registrant.

DOE/FE finds that the submission of all such agreements or contracts within 30 days of their execution using the procedures described below will be consistent with the "to the extent practicable" requirement of section 590.202(b). By way of example and without limitation, a "relevant long-term commercial agreement" would include an agreement with a minimum term of two years, an agreement to provide gas processing or liquefaction services at the Cameron Terminal, a long-term sales contract involving natural gas or LNG stored or liquefied at the Terminal, or an agreement to provide export services from the Terminal.

In addition, DOE/FE finds that section 590.202(c) of DOE/FE's regulations<sup>84</sup> requires that Cameron LNG file, or cause to be filed, all long-term contracts associated with the long-term supply of natural gas to the Cameron Terminal, whether signed by Cameron LNG or the Registrant, within 30 days of their execution.

DOE/FE recognizes that some information in Cameron LNG's or a Registrant's long-term commercial agreements associated with the export of LNG, and/or long-term contracts associated with the long-term supply of natural gas to the Cameron Terminal, may be commercially sensitive. DOE/FE therefore will provide Cameron LNG the option to file or cause to be filed either unredacted contracts, or in the alternative (A) Cameron LNG may file, or cause to be filed, long-term contracts under seal, but it also will file either: i) a copy of each long-term contract with commercially sensitive information redacted, or ii) a summary of all major provisions of the contract(s) including, but not limited to, the parties to each contract,

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<sup>84</sup> Id. § 590.202(c).

contract term, quantity, any take or pay or equivalent provisions/conditions, destinations, re-sale provisions, and other relevant provisions; and (B) the filing must demonstrate why the redacted information should be exempted from public disclosure.

To ensure that DOE/FE destination and reporting requirements included in this Order are conveyed to subsequent title holders, DOE/FE will include as a condition of this authorization that future contracts for the sale or transfer of LNG exported pursuant to this Order shall include an acknowledgement of these requirements.

## **H.** Export Quantity

This Order authorizes the export of LNG in the full amount requested up to the equivalent of 152 Bcf/yr of natural gas (0.42 Bcf/d) set forth in Ordering Paragraph A below. This export volume is not additive to the authorized export quantity in Cameron LNG's FTA authorization in DOE/FE Order No. 3620. However, this quantity is additive to the export volumes set forth in Cameron LNG's other FTA authorizations in DOE/FE Order Nos. 3059 and 3680 and in Cameron LNG's non-FTA authorization in DOE/FE Order No. 3391-A.

#### I. Environmental Review

As explained above, the Application qualifies for a categorical exclusion, which DOE/FE issued on March 18, 2016. No additional environmental review or environmental conditions are necessary.

#### IX. FINDINGS

On the basis of the findings and conclusions set forth above, DOE/FE finds that it has not been shown that a grant of the requested authorization will be inconsistent with the public interest, and DOE/FE further finds that Cameron LNG's Application should be granted subject to

the Terms and Conditions set forth herein. The following Ordering Paragraphs reflect current DOE/FE practice.

#### X. ORDER

Pursuant to section 3 of the Natural Gas Act, it is ordered that:

- A. Cameron LNG, LLC is authorized to export domestically produced LNG by vessel from the Cameron Terminal located in Cameron and Calcasieu Parishes, Louisiana, in a volume up to the equivalent of 152 Bcf/yr of natural gas for a term of 20 years to commence on the date of first commercial export, but not before. Cameron LNG is authorized to export this LNG on its own behalf and as agent for other entities who hold title to the natural gas, pursuant to one or more long-term contracts (a contract greater than two years).
- B. Cameron LNG may export Commissioning Volumes prior to the commencement of the terms of this Order, pursuant to a separate short-term export authorization. The Commissioning Volumes will not be counted against the maximum level of volumes previously authorized in any of Cameron LNG's FTA and non-FTA orders, including this Order.
- C. Cameron LNG may continue exporting for a total of three years following the end of the 20-year export term, solely to export any Make-Up Volume that it was unable to export during the original export period. The three-year Make-Up Period allowing the export of Make-Up Volumes does not affect or modify the total volume of LNG previously authorized for export in any of SPL's FTA and non-FTA orders, including this Order. Insofar as Cameron LNG may seek to export additional volumes not previously authorized for export, it will be required to obtain appropriate authorization from DOE/FE.
- D. Cameron LNG must commence export operations using the planned liquefaction facilities no later than seven years from the date of issuance of this Order.

- E. The LNG export quantity authorized in this Order is equivalent to 152 Bcf/yr of natural gas. This export volume is not additive to the authorized export quantity in Cameron LNG's FTA authorization in DOE/FE Order No. 3620. However, this quantity is additive to the export volumes set forth in Cameron LNG's other FTA authorizations in DOE/FE Order Nos. 3059 and 3680 and in Cameron LNG's non-FTA authorization in DOE/FE Order No. 3391-A.
- F. This LNG may be exported to any country with which the United States does not have a FTA requiring the national treatment for trade in natural gas, which currently has or in the future develops the capacity to import LNG, and with which trade is not prohibited by United States law or policy.
- G. Cameron LNG shall ensure that all transactions authorized by this Order are permitted and lawful under U.S. laws and policies, including the rules, regulations, orders, policies, and other determinations of the Office of Foreign Assets Control of the United States and the Department of the Treasury and FERC. Failure to comply with this requirement could result in rescission of this authorization and/or other civil or criminal remedies.
- H. (i) Cameron LNG shall file, or cause others to file, with the Office of Regulation and International Engagement a non-redacted copy of all executed long-term contracts associated with the long-term export of LNG as agent for other entities from the Cameron Terminal. The non-redacted copies may be filed under seal and must be filed within 30 days of their execution. Additionally, if Cameron LNG has filed the contracts described in the preceding sentence under seal or subject to a claim of confidentiality or privilege, within 30 days of their execution, Cameron LNG shall also file, or cause others to file, for public posting either: a) a redacted version of the contracts described in the preceding sentence, or b) major provisions of the

contracts. In these filings, Cameron LNG shall state why the redacted or non-disclosed information should be exempted from public disclosure.

- (ii) Cameron LNG shall file, or cause others to file, with the Office of Regulation and International Engagement a non-redacted copy of all executed long-term contracts associated with the long-term supply of natural gas to the Cameron Terminal. The non-redacted copies may be filed under seal and must be filed within 30 days of their execution. Additionally, if Cameron LNG has filed the contracts described in the preceding sentence under seal or subject to a claim of confidentiality or privilege, within 30 days of their execution, Cameron LNG shall also file, or cause others to file, for public posting either: i) a redacted version of the contracts described in the preceding sentence, or ii) major provisions of the contracts. In these filings, Cameron LNG shall state why the redacted or non-disclosed information should be exempted from public disclosure.
- I. Cameron LNG, or others for whom Cameron LNG acts as agent, shall include the following provision in any agreement or other contract for the sale or transfer of LNG exported pursuant to this Order and any other applicable DOE/FE authorization:

Customer or purchaser acknowledges and agrees that it will resell or transfer LNG purchased hereunder for delivery only to countries identified in Ordering Paragraph F of DOE/FE Order No. 3797, issued March 18, 2016, in DOE/FE Docket No. 15-67-LNG, and/or to purchasers that have agreed in writing to limit their direct or indirect resale or transfer of such LNG to such countries. Customer or purchaser further commits to cause a report to be provided to Cameron LNG, LLC that identifies the country (or countries) into which the exported LNG or natural gas was actually delivered and/or received for end use, and to include in any resale contract for such LNG the necessary conditions to insure that Cameron LNG, LLC is made aware of all such actual destination countries.

J. Cameron LNG is permitted to use its authorization in order to export LNG as agent for other entities, after registering the other parties with DOE/FE. Registration materials shall include an acknowledgement and agreement by the Registrant to supply Cameron LNG with all

information necessary to permit Cameron LNG to register that person or entity with DOE/FE, including: (1) the Registrant's agreement to comply with this Order and all applicable requirements of DOE/FE's regulations at 10 C.F.R. Part 590, including but not limited to destination restrictions; (2) the exact legal name of the Registrant, state/location of incorporation/registration, primary place of doing business, and the Registrant's ownership structure, including the ultimate parent entity if the Registrant is a subsidiary or affiliate of another entity; (3) the name, title, mailing address, e-mail address, and telephone number of a corporate officer or employee of the Registrant to whom inquiries may be directed; and (4) within 30 days of execution, a copy of any long-term contracts not previously filed with DOE/FE, described in Ordering Paragraph I of this Order.

K. Each registration submitted pursuant to this Order shall have current information on file with DOE/FE. Any changes in company name, contact information, change in term of the long-term contract, termination of the long-term contract, or other relevant modification, shall be filed with DOE/FE within 30 days of such change(s).

L. As a condition of this authorization, Cameron LNG shall ensure that all persons required by this Order to register with DOE/FE have done so. Any failure by Cameron LNG to ensure that all such persons or entities are registered with DOE/FE shall be grounds for rescinding in whole or in part the authorization.

M. Within two weeks after the first export of domestically produced LNG occurs from the Cameron Terminal, Cameron LNG shall provide written notification of the date that the first export of LNG authorized in Ordering Paragraph A above occurred.

N. Cameron LNG shall file with the Office of Regulation and International Engagement, on a semi-annual basis, written reports describing the progress of the Cameron Liquefaction

Project. The reports shall be filed on or by April 1 and October 1 of each year, and shall include information on the status of the long-term contracts associated with the long-term export of LNG and any long-term supply contracts.

O. With respect to any change in control of the authorization holder, Cameron LNG must obtain the approval of the Assistant Secretary for Fossil Energy. For purposes of this Ordering Paragraph, a "change in control" shall include any change, directly or indirectly, of the power to direct the management or policies of Cameron LNG, whether such power is exercised through one or more intermediary companies or pursuant to an agreement, written or oral, and whether such power is established through ownership or voting of securities, or common directors, officers, or stockholders, or voting trusts, holding trusts, or debt holdings, or contract, or any other direct or indirect means.<sup>85</sup>

P. Monthly Reports: With respect to the LNG exports authorized by this Order, Cameron LNG shall file with the Office of Regulation and International Engagement, within 30 days following the last day of each calendar month, a report indicating whether exports of LNG have been made. The first monthly report required by this Order is due not later than the 30<sup>th</sup> day of the month following the month of first export. In subsequent months, if exports have not occurred, a report of "no activity" for that month must be filed. If exports of LNG have occurred, the report must give the following details of each LNG cargo: (1) the name(s) of the authorized exporter registered with DOE/FE; (2) the name of the U.S. export terminal; (3) the name of the LNG tanker; (4) the date of departure from the U.S. export terminal; (5) the country (or countries) into which the exported LNG or natural gas is actually delivered and/or received for end use; (6) the name of the supplier/seller; (7) the volume in Mcf; (8) the price at point of

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<sup>&</sup>lt;sup>85</sup> See, U.S. Dep't of Energy, Procedures for Changes in Control Affecting Applications and Authorizations to Import or Export Natural Gas, 79 Fed. Reg. 65,641 (Nov. 5, 2014).

export per million British thermal units (MMBtu); (9) the duration of the supply agreement; and (10) the name(s) of the purchaser(s).

(Approved by the Office of Management and Budget under OMB Control No. 1901-0294)

Q. All monthly report filings shall be made to U.S. Department of Energy (FE-34), Office of Fossil Energy, Office of Regulation and International Engagement, P.O. Box 44375, Washington, D.C. 20026-4375, Attention: Natural Gas Reports. Alternatively, reports may be e-mailed to ngreports@hq.doe.gov or may be faxed to Natural Gas Reports at (202) 586-6050.

Issued in Washington, D.C., on March 18, 2016.

Christopher A. Smith Assistant Secretary

Office of Fossil Energy