UNITED STATES OF AMERICA

DEPARTMENT OF ENERGY

OFFICE OF FOSSIL ENERGY

AIR FLOW NORTH AMERICA CORP.	)))	FE DOCKET NO. 14-206-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

DOE/FE ORDER NO. 3753

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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
CNG	Compressed Natural Gas
DOE	U.S. Department of Energy
EIA	U.S. Energy Information Administration
EPA	U.S. Environmental Protection Agency
FE	Office of Fossil Energy, U.S. Department of Energy
FERC	Federal Energy Regulatory Commission
FLEX	Freeport LNG Expansion, L.P. and FLNG Liquefaction LLC
FTA	Free Trade Agreement
LNG	Liquefied Natural Gas
LOI	Letter of Intent
Mcf	Thousand Cubic Feet
MMBtu	Million British Thermal Units
NEMS	National Energy Modeling System
NEPA	National Environmental Policy Act
NERA	NERA Economic Consulting
NGA	Natural Gas Act
NOA	Notice of Availability
VOC	Volatile Organic Compound

I. INTRODUCTION

On December 16, 2014, Air Flow North America Corp. (Air Flow) filed an application (Application)[1] with the Office of Fossil Energy (FE) of the Department of Energy (DOE) under section 3 of the Natural Gas Act (NGA)[2] requesting long-term, multi-contract authorization to export up to 22,000 gallons per day of domestically produced liquefied natural gas (LNG). According to Air Flow, this volume is equivalent to approximately 0.67 billion cubic feet per year (Bcf/yr) of natural gas, or 0.002 Bcf per day (Bcf/d).[3] Air Flow requests this authorization for a 25-year period commencing on the earlier of the date of first export or five years from the date that the requested authorization is granted. Air Flow states that it will transport this LNG in approved ISO IMO7/TVAC-ASME LNG (ISO) containers by truck from an existing LNG production facility in Willis, Texas (Facility) owned by Clean Energy Fuels Corp. (Clean Energy) to one or more ports in the Southeastern United States. Air Flow proposes to have the ISO containers holding the LNG loaded at the ports onto ocean-going vessels for export. Air Flow seeks authority to export this LNG to any country located within Central America, South America, the Caribbean, or Africa with which the United States does not have a free trade agreement (FTA) requiring national treatment for trade in natural gas and with which trade is not prohibited by U.S. law or policy (non-FTA countries), and which has or, in the future develops, the capacity to import LNG in ISO containers via ocean-going vessels.

[1] Air Flow North America Corp., Application for Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries, FE Docket No. 14-206-LNG (Dec. 16, 2014) [hereinafter Air Flow App.].
[2] The authority to regulate the imports and exports of natural gas, including compressed natural gas, under section 3 of the NGA (15 U.S.C. § 717b) has been delegated to the Assistant Secretary for FE in Redelegation Order No. 00-006.02 issued on November 17, 2014.
[3] As relevant here, DOE's regulations require applicants to provide volumes of requested exports in terms of Bcf of natural gas. 10 C.F.R. § 590.202(b)(1). The Application requests authority to export up to 22,000 gallons of LNG per day but states that the equivalent amount stated in cubic feet is 0.67 Bcf/yr. Air Flow App. at 1 n.3. Accordingly, DOE/FE will authorize Air Flow's requested export of 22,000 gallons per year as the equivalent of 0.67 Bcf/yr of natural gas.

On June 29, 2014, DOE/FE published a Notice of Air Flow's Application in the Federal Register.[4] The Notice of Application called on interested persons to submit protests, motions to intervene, notices of intervention, and comments no later than 4:30 p.m., Eastern Time, on August 28, 2015. DOE/FE received no responses to the Notice of Application. Consequently, the Application is uncontested.

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*), the Department's first order conditionally granting a long-term authorization to export liquefied natural gas (LNG) produced in the lower-48 states to non-FTA countries.[5] 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.[6] 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.[7]

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[4] Air Flow, LLC, Application for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas Produced to Non-Free Trade Agreement Countries, 80 Fed. Reg. 36,979 (June 29, 2015) [hereinafter Air Flow Notice of Application].

[5] *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961, 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).

[6] 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.

[7] *See* 2012 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 (Federal Register Notice of Availability of the LNG Export Study).

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), the most recent EIA projections available at the time.[8] 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.[9] 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 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.[10] 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.

[8] 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.
[9] *See* LNG Export Study – Related Documents, *available at* http://energy.gov/fe/downloads/lng-export-study-related-documents (EIA Analysis (Study - Part 1)).
[10] *See id*. (NERA Economic Consulting Analysis (Study - Part 2)).

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).[11] 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.[12] The NOA required initial comments by January 24, 2013, and reply comments between January 25 and February 25, 2013.[13] DOE/FE received over 188,000 initial comments and over 2,700 reply comments, of which approximately 800 were unique.[14] 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 record of several non-FTA export proceedings.[15] DOE/FE has carefully examined the comments in a series of non-FTA LNG export decisions, and the precedents established in those decisions have been considered in our review of Air Flow's Application.[16]

[11] 77 Fed. Reg. at 73,627.
[12] *Id*. at 73,628.
[13] *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.
[14] 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.html (Reply Comments – LNG Export Study).
[15] *See* 77 Fed. Reg. at 73,629.
[16] *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

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 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*.[17] 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.[18]

DOE/FE has taken the Draft Addendum, all public comments on the Draft Addendum, and the final Addendum into consideration in a series of non-FTA LNG export decisions, and the precedents established in those decisions have been factored into our review of Air Flow's Application.[19] 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.

Loaded at the Proposed Hialeah Facility near Medley, Florida, and Exported by Vessel to Non-Free Trade Agreement Nations (Aug. 7, 2015) (§§ V, VIII).

[17] 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.

[18] 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].

[19] *See e.g., American LNG Marketing LLC*, DOE/FE Order No. 3690, at § IX.

C. DOE/FE's Categorical Exclusion Under NEPA

On December 3, 2015, DOE/FE issued a categorical exclusion from the preparation of an environmental impact statement or environmental assessment under NEPA for Air Flow's Application (Categorical Exclusion).[20] Specifically, DOE/FE applied categorical exclusion B5.7 of DOE/FE's 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 Air Flow'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 Air Flow's proposed exports of LNG under NGA section 3(a), including both environmental and non-environmental issues.[21] As the basis for this Order, DOE/FE has reviewed a wide range of information, including but not limited to Air Flow's Application, a letter of amendment submitted by Air Flow on June 1, 2015, 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 grants Air Flow's Application to export domestically produced LNG from the Clean Energy Fuels Corp. Facility in Willis, Texas, in a volume equivalent to 0.67 Bcf/yr of natural gas (0.002 Bcf/d) for a 20-year term. As requested in the Application, Air Flow is authorized to export this

[20] U.S. Dep't of Energy, Categorical Exclusion Determination, *Air Flow North America Corp.*, FE Docket No. 14-206-LNG (December 3, 2015) [hereinafter Categorical Exclusion].
[21] 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).

LNG to any non-FTA country located within Central America, South America, the Caribbean, or Africa that has, or in the future develops, the capacity to import LNG in ISO containers via ocean-going vessels. 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. *See infra* §§ VIII and X.

IV. PUBLIC INTEREST STANDARD

Section 3(a) of the NGA sets forth the standard for review of Air Flow'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[22]] 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.[23]

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.

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[22] 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.

[23] *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).

DOE/FE's prior decisions have also looked to certain principles established in its 1984 Policy Guidelines.[24] The goals of the Policy Guidelines are to minimize federal control and 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] natural gas …. The federal government's primary responsibility in authorizing imports [or exports] will 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.[25]

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.[26]

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."[27] In February 1989, the Assistant Secretary for Fossil Energy assumed the delegated responsibilities of the Administrator of ERA.[28]

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

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[24] New Policy Guidelines and Delegations Order Relating to Regulation of Imported Natural Gas, 49 Fed. Reg. 6684 (Feb. 22, 1984) [hereinafter 1984 Policy Guidelines].
[25] *Id*. at 6685.
[26] *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)).
[27] DOE Delegation Order No. 0204-111, at 1; *see also* 49 Fed. Reg. at 6690.
[28] *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)).

domestic natural gas supplies, (iii) whether the arrangement is consistent with DOE/FE's policy of promoting market competition, and (iv) any other factors bearing on the public interest described herein.

V. DESCRIPTION OF REQUEST

As indicated above, Air Flow requests long-term, multi-contract authorization to export domestically produced LNG from the Facility to non-FTA countries in specified regions in a volume equivalent to 0.67 Bcf/yr of natural gas (0.002 Bcf/d). Air Flow requests this authorization for a 25-year term, commencing on the earlier of the date of first export or five years from the date of this Order. Air Flow states that its Application is distinguishable from other recently approved and pending non-FTA LNG export applications due to the relatively small volume of LNG proposed for export in this proceeding. Air Flow further maintains that export of these small volumes will not have any significant impact on domestic natural gas supply.[29]

A. Description of Applicant

Air Flow states that it is a corporation organized under the laws of the State of Delaware and that its principal place of business is The Woodlands, Texas. Air Flow further states that its stock is 90 percent owned by Air Flow SAS, a corporation organized under French law, and 10 percent by SIL, another corporation organized under French law.

B. Clean Energy Facility

Air Flow proposes to obtain LNG for export from the Clean Energy Facility in Willis, Texas. Air Flow states that the Facility, built in 1994, produces 100,000 gallons of LNG per day and is able to store one million gallons of LNG on site. According to Air Flow, its ISO containers have a capacity of 11,000 gallons of LNG. Air Flow maintains that up to 120,000

[29] Air Flow App. at 6.

gallons of LNG can be loaded from the Facility's single truck loading rack per day. However, the Application only requests authority to export up to 22,000 gallons per day. Truck traffic from the Facility therefore will be limited to no more than two trucks per day, or less than one truck every four hours over a 12-hour period.

C. Business Model

Air Flow requests long-term authorization to engage in the proposed exports solely on its own behalf. Air Flow states that it is in discussions with a major downstream distributor as well as customers in non-FTA countries. Those discussions, according to Air Flow, have focused on serving growing demand for natural gas from the power plant sector and vehicle fuel markets, which are considering switching from burning other fossil fuels and petroleum products to cleaner burning natural gas.

D. Source of Natural Gas

Air Flow states that it will obtain natural gas from "the robust and liquid United States natural gas market."[30] Air Flow indicates that it will be purchasing LNG under long-term purchase agreements, with Clean Energy and other suppliers that will be named in letters of intent (LOIs).[31] The appendices to the Application include copies of a LOI and a first amendment to the LOI between Air Flow and Clean Energy providing for Air Flow's purchase of LNG from Clean Energy. The term of the LOI is seven years from the date of execution of the first amendment (July 13, 2021), with automatic renewals thereafter unless one of the parties to the LOI elects to terminate. Air Flow states that Clean Energy has and expects to continue to have an excess supply of LNG that it is unable to effectively market within the United States.

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[30] Air Flow App. at 5.
[31] DOE/FE considers long-term agreements as those with terms greater than two years.

E. Environmental Review

Air Flow states that no new facilities or modifications to any existing facilities would be required in order for it to export LNG, as proposed in the Application. Air Flow adds:

> In the limited cases in which the owners of liquefaction facilities that sell and deliver LNG to Air Flow opt to make minor modifications to their facilities to accommodate the slight additional volume of LNG resulting from such deliveries, or to account for the temperature requirements of LNG versus other liquefied petroleum products, those owners of liquefaction facilities will obtain the necessary state, local or federal permits before any such modifications or deliveries occur.[32]

Air Flow maintains that approval of the Application would not constitute a federal action significantly affecting the human environment within the meaning of NEPA.

VI. APPLICANT'S PUBLIC INTEREST ANALYSIS

Air Flow maintains that DOE precedent and policy support a grant of the requested export authorization. Air Flow states that it is seeking to export relatively small volumes of LNG, as compared to other export applications recently approved and pending before DOE/FE. Air Flow states that exports of these small volumes are possible due to a combination of increased domestic supplies and the development of approved containers allowing the safe and effective transport of smaller volumes of LNG than had previously been practicable. These developments, according to Air Flow, will allow it to take advantage of excess natural gas supply in the United States in order to meet the needs of customers in Central America, South America, the Caribbean, and Africa, destinations that do not have the infrastructure and demand necessary to justify larger volume deliveries of LNG via tanker vessels.

Air Flow states that the export of these small volumes also are not sufficient to have an adverse impact on domestic supply when compared to the United States natural gas market as a whole. Air Flow asserts that there are large volumes of domestic shale gas reserves and that its

[32] Air Flow App. at 9.

development and extraction, coupled with low production costs, will enable the United States to meet domestic demand for decades to come while at the same time making LNG available for export. In this regard, Air Flow states that the Annual Energy Outlook (AEO) 2010, prepared by EIA, forecast shale gas production to increase to 2.85 trillion cubic feet (Tcf) by 2015 and 6.0 Tcf by 2035. This represents, according to Air Flow, a 5.3 percent annual growth rate from 2008 to 2035. Air Flow also states that, in AEO 2011, EIA more than doubled its estimate of technically recoverable shale gas reserves, and doubled projected shale gas production to 12.0 Tcf by 2035. Air Flow contends that the decrease in natural gas prices from 2008 to 2010 is further evidence of the current excess supply of natural gas. Moreover, according to Air Flow, exports of LNG could expand the market for domestic natural gas producers, thereby encouraging domestic production available for domestic requirements when low domestic gas prices might not do so.

Air Flow states that, although the volumes that it seeks to export are relatively small compared to United States domestic supplies, the volumes represent an important amount of gas that would benefit small countries who do not have other access to natural gas. By focusing on this small customer market, Air Flow maintains that the proposed exports will help these countries diversify their fuel supplies, while contributing to greater overall transparency, efficiency, and liquidity of international natural gas markets. According to Air Flow, this will relieve these countries' dependence on diesel or fuel oil and thus reduce the negative environmental impacts of their generation fuel. Air Flow also asserts that the proposed exports will benefit the United States, in facilitating the use of a more environmentally benign fuel by this country's close neighbors. Air Flow states that, at the same time, the proposed exports will improve the United States' trade balance and support President Obama's National Export Initiative signed in 2010.

Air Flow maintains that approval of its Application also would enable it to foster the development of a natural gas by-product market, *i.e.* a market in natural gas liquids such as ethane, propane, and condensates that can be substituted for petroleum products made from imported oil. Air Flow states that this will encourage the development of new, additional productive resources in the United States. It also, according to Air Flow, may help decouple international natural gas prices and oil prices in some markets and may exert downward pressure on natural gas prices in those markets.

Furthermore, Air Flow maintains that its proposed exports of domestic LNG will encourage job creation in the United States. These jobs, Air Flow states, will develop among the qualified domestic transportation companies that will be used to transport the LNG to port and within Air Flow's own marketing and sales staff.

VII. DISCUSSION AND CONCLUSIONS

In reviewing Air Flow'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 a wide range of information addressing non-environmental and environmental factors, including:

- Air Flow's Application and letter amending the Application;
- The 2012 LNG Export Study, including comments received in response to the Study; and
- 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 and discussed below.

To avoid repetition, the following discussion focuses on arguments and evidence presented by Air Flow 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. Air Flow's Application

Upon review, we find that several factors identified in the Application support a grant of the authorization to export domestically produced LNG in an amount equivalent to 0.67 Bcf/yr of natural gas, or 0.002 Bcf/d.

First, we agree with Air Flow that the volume of LNG authorized for export in this Order—equivalent to 0.002 Bcf/d of natural gas—will have no practical impact on natural gas prices or security of domestic supply in the United States, as evidenced by the 2012 LNG Export Study.

Second, as discussed below, the 2012 LNG Export Study shows that the proposed exports will generate economic benefits to the broader U.S. economy.

Third, it is reasonable to conclude, as contended by Air Flow, that LNG exports from the Clean Energy Facility will provide economic benefits in the form of job creation within the transportation industry engaged in moving the LNG to ports in the Southeastern United States and within Air Flow's own marketing and sales staff. We note in this regard that the Application is unopposed and, therefore, there is no contrary evidence or argument in the record before us.

Fourth, we agree with Air Flow that the proposed exports will help the destination countries in Central America, South America, the Caribbean, and Africa to diversify their fuel supplies and will ease those countries' dependence on diesel or fuel oil. It also will promote the use of cleaner burning natural gas.

Fifth, as also discussed below, the proposed exports will benefit the liquidity of international natural gas markets and make a positive contribution to the United States' trade balance. For this reason, Air Flow's proposed exports are consistent with U.S. policy under the National Export Initiative.

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 non-FTA export authorizations to date, including the export of LNG authorized in this Order (equivalent to a total of 10.008 Bcf/d of natural gas). *See infra* § X.D, E. 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 Air Flow'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, EIA's most recent projections, set forth 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."[33]

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

[33] National Export Initiative, 75 Fed. Reg. 12,433 (Mar. 16, 2010).

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 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 Air Flow'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, Air Flow proposes to acquire LNG from a facility that is already constructed and operating. Implementation of Air Flow's proposal will not involve any additional construction. The only operational changes will involve the loading of LNG into no more than two ISO containers per day and the transportation of those ISO containers by truck from the Facility to the designated port.

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 Air Flow's requested authorization to export LNG from the Facility fall within the scope of the B5.7 categorical exclusion because the contemplated construction and operations will not be changed due to action on Air Flow's Application. Accordingly, on December 3, 2015, 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 Air Flow's Application is required under NEPA. Other factors supporting this determination include: (i) the relatively small volume authorized for export under the Application, and (ii) the fact that no interventions or comments have been submitted in this proceeding raising environmental concerns associated with the proposed exports. 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.[34] 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 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

[34] Addendum at 2.

federal, state, or local regulation, or through self-imposed industry guidelines where appropriate—rather than by prohibiting exports of natural gas. Unlike DOE, environmental 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, the U.S. Environmental Protection Agency (EPA) promulgated regulations for hydraulically fractured wells that are expected to yield significant emissions reductions.[35] In 2013, EPA updated those regulations to include storage tanks,[36] 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.[37] 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."[38] 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

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[35] 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).
[36] 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).
[37] U.S. Envtl. Prot. Agency, Office of Air Quality Planning & Standards, *White Papers on Methane and VOC Emissions*, *available at* http://www.epa.gov/airquality/oilandgas/whitepapers.html) (released April 15, 2014). .
[38] 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.

transmission sources.[39] EPA recently issued the proposed rule, with a final rule expected to follow in 2016.[40]

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 and compressed natural gas (CNG) export projects will ever be realized because of the time, difficulty, and expense of commercializing, financing,

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[39] 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* https://www.whitehouse.gov/the-press-office/2015/01/14/fact-sheet-administration-takes-steps-forward-climateaction-plan-anno-1.

[40] *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).

and constructing such projects, as well as the uncertainties inherent in the global market demand for LNG and CNG.

More generally, DOE/FE continues to subscribe to the principle set forth in our 1984 Policy Guidelines[41] that, under most circumstances, the market is the most efficient means of allocating natural gas supplies. However, we recognize that agency intervention may be 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.[42] 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 Air Flow's proposed exports of LNG to non-FTA countries located within Central America, South America, the Caribbean, and Africa will be inconsistent with the public interest. For that reason, we are authorizing Air Flow's proposed exports to non-FTA countries in those specified regions, 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

[41] 49 Fed. Reg. at 6684.

[42] 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).

authorizations. With the issuance of this Order, DOE/FE has now issued final non-FTA authorizations in a cumulative volume of exports totaling 10.008 Bcf/d of natural gas, or 3.652 trillion cubic feet per year, for the 12 final authorizations issued to date— Sabine Pass Liquefaction, LLC (2.2 Bcf/d),[43] Carib Energy (USA) LLC (0.04 Bcf/d),[44] Cameron LNG, LLC (1.7 Bcf/d),[45] FLEX I (1.4 Bcf/d),[46] FLEX II (0.4 Bcf/d),[47] Dominion Cove Point LNG, LP (0.77 Bcf/d),[48] Cheniere Marketing, LLC and Corpus Christi Liquefaction, LLC (2.1 Bcf/d),[49] Sabine Pass Liquefaction, LLC Expansion Project (1.38 Bcf/d),[50] American LNG (0.008 Bcf/d),[51] Emera CNG, LLC (0.008 Bcf/d),[52] Floridian Natural Gas Storage Company, LLC,[53] and this

[43] *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).

[44] *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).

[45] *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).

[46] *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).

[47] *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).

[48] *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).

[49] *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).

[50] *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 Free Trade Agreement Nations (June 26, 2015).

[51] *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).

[52]*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

Order (0.002 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.[54] 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. 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 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

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Compression and Loading Facility at the Port of Palm Beach, Florida, to Non-Free Trade Agreement Nations (Oct. 19, 2015).

[53] *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).

[54] *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").

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. Air Flow must abide by each term and condition or may face rescission of its authorization or other appropriate sanction.

A. Term of the Authorization

Air Flow has requested a 25-year term for the authorization commencing on the earlier of the date of first export or five years from the date that the requested authorization is granted. However, we find that it is in the public interest to limit the authorization to no longer than a 20-year term beginning on the date of first export but not before. Other applicants for long-term LNG export authorizations from the lower-48 states likewise have received terms no longer than 20 years[55] and this shortened term will provide DOE with an earlier opportunity (after 20 years) to reassess whether the authorization continues to function in the public interest. Furthermore, we note that the long-term portion of the LOI in effect between Air Flow and Clean Energy ends after seven years of the date that the first amendment of the LOI was executed (July 13, 2021).

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[55] *See, e.g. Sabine Pass*, DOE/FE Order No. 2961-A, at 29.

B. Commencement of Operations Within Five Years

Air Flow, as indicated above, requested its authorization to commence on the earlier of the date of first export or five years from the date of the issuance of this Order. Consistent with this request, DOE/FE will add as a condition of the authorization that Air Flow must commence commercial LNG export operations no later than five years from the date of issuance of this Order.

C. Transfer, Assignment, or Change in Control

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.[56] As a condition of the similar authorization issued to Sabine Pass in 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 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

[56] 10 C.F.R. § 590.405.

ownership or the power to vote, directly or indirectly, 10 percent or more of the voting securities of such entity.[57]

D. 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."[58] 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.[59]

DOE/FE will require that Air Flow file or cause to be filed with DOE/FE any relevant long-term commercial agreements, including sale and purchase agreements, pursuant to which Air Flow exports LNG.

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 a sale and purchase agreement with a minimum term of two years pursuant to which Air Flow exports LNG from the Facility.

In addition, DOE/FE finds that section 590.202(c) of DOE/FE's regulations[60] requires that Air Flow file all long-term contracts associated with the long-term supply of natural gas to the Facility for export pursuant to this authorization within 30 days of their execution.

[57] For information on DOE/FE's procedures governing a change in control, 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).
[58] 10 C.F.R. § 590.202(b).
[59] *Id*. § 590.202(e).
[60] *Id*. § 590.202(c).

DOE/FE recognizes that some information in Air Flow'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 Facility for export, may be commercially sensitive. DOE/FE therefore will provide Air Flow the option to file unredacted contracts, or in the alternative (A) Air Flow may file 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, 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.

IX. FINDINGS

On the basis of the findings and conclusions set forth above, we find that it has not been shown that a grant of the requested authorization will be inconsistent with the public interest, and we further find that Air Flow'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. Air Flow North American Corp. is authorized to export domestically produced LNG in approved ISO containers loaded at the Clean Energy Fuels Corp. Facility, in Willis, Texas, and exported by vessel in an amount up to the equivalent of 0.67 Bcf/yr of natural gas. This authorization is for a term of 20 years to commence on the date of first commercial export.

B. Air Flow is authorized to export this LNG solely on its own behalf, pursuant to one or more long-term contracts (contracts having terms greater than two years).

C. Air Flow must commence export operations using the Facility no later than five years from the date of issuance of this Order (December 4, 2020).

D. This LNG may be exported to any country in Central America, South America, the Caribbean, or Africa which presently has, or in the future develops, the capacity to import LNG from ISO containers transported on ocean-going carriers or other waterborne vessels, provided that the country does not have a FTA with the United States requiring the national treatment for trade in natural gas, and with which trade is not prohibited by U.S. law or policy.

E. Air Flow 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 U. S. Department of the Treasury and the U.S. Department of Transportation. Additionally, Air Flow shall ensure that any third parties with whom Air Flow (or others on Air Flow's behalf) contracts to handle truck transport in ISO containers will obtain and comply with any required federal, state, or local permits relating to hazardous materials and cryogenic handling. Failure to comply with these requirements could result in rescission of this authorization and/or other civil or criminal remedies.

F. (i) Air Flow shall file with the Office of Regulation and International Engagement, Division of Natural Gas Regulation, a non-redacted copy of <u>all executed long-term contracts associated with the long-term export of LNG</u> from the Clean Energy Facility. The non-redacted copies may be filed under seal and must be filed within 30 days of their execution. Additionally, if Air Flow 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, Air Flow shall also 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, Air Flow shall state why the redacted or non-disclosed information should be exempted from public disclosure.

(ii) Air Flow shall file, or cause others to file, with the Office of Regulation and International Engagement, Division of Natural Gas Regulation, a non-redacted copy of <u>all executed long-term contracts associated with the long-term supply of natural gas</u> to the Clean Energy Facility. The non-redacted copies may be filed under seal and must be filed within 30 days of their execution. Additionally, if Air Flow 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, Air Flow shall also 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, Air Flow shall state why the redacted or non-disclosed information should be exempted from public disclosure.

G. Air Flow shall include the following provision in any agreement or other contract for the sale or transfer of LNG exported pursuant to this Order:

> Customer or purchaser acknowledges and agrees that it will resell or transfer LNG purchased hereunder for delivery only to countries identified in Ordering Paragraph D of DOE/FE Order No. 3753, issued December 4, 2015, in FE Docket No. 14-206-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 Air Flow North America Corp. 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 Air Flow North America Corp. is made aware of all such countries.

H. Within two weeks after the first export of domestically produced LNG by Air Flow occurs from the Clean Energy Facility, Air Flow shall provide written notification of the date that the first export of LNG authorized in Ordering Paragraph A above occurred.

I. Air Flow shall file with the Office of Regulation and International Engagement, Division of Natural Gas Regulation, on a semi-annual basis, written reports identifying the date the exports authorized by this Order are expected to commence, and the status of the long-term contracts associated with the long-term export of LNG and any related long-term supply contracts.

J. Prior to any change in control of the authorization holder, Air Flow must comply with DOE/FE Procedures for Change in Control Affecting Applications and Authorizations to Import or Export Natural Gas.[61] 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 Air Flow, 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.[62]

K. Monthly Reports: With respect to the LNG exports authorized by this Order, Air Flow 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 30th day of the month following the month of first export. In subsequent months, if exports have not

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[61] *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. 65,541 (Nov. 5, 2014).
[62] *See id*. at 65,542.

occurred, a report of "no activity" for that month must be filed. If exports of LNG in ISO containers by vessel 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 vessel; (4) the date of departure from the U.S. export terminal; (5) the country (or countries) into which the LNG 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 export per million British thermal units (MMBtu); (9) the name and location (city/state) of the facility where the ISO container is loaded with LNG; (10) the mode(s) of transport used to move the loaded ISO container from the loading facility to the export port or terminal; (11) the duration of the supply agreement (indicate spot sales); and (12) the name(s) of the purchaser(s). (Approved by the Office of Management and Budget under OMB Control No. 1901-0294)

L. 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 December 4, 2015.

Christopher A. Smith
Assistant Secretary
Office of Fossil Energy