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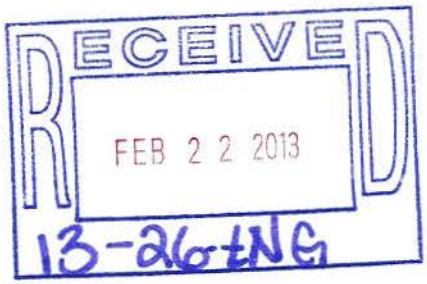

February 22, 2013

VIA HAND DELIVERY
Mr. John A. Anderson
Office of Fossil Energy
U.S. Department of Energy
Docket Room 3F-056, FE-50
Forrestal Building
1000 Independence Avenue, S.W.
Washington, DC 20585

RE: Freeport-McMoRan Energy LLC, Docket No. 13-26 - LNG
Application for Long-Term Authorization to Export Liquefied Natural Gas

Dear Mr. Anderson:

Freeport-McMoRan Energy LLC ("FME") is developing a project to export liquefied natural gas ("LNG") from the United States. In the enclosed application, FME seeks long-term, multi-contract authorization for itself or as agent for others under Section 3 of the Natural Gas Act to export up to 24 million tons of LNG per annum (equivalent to approximately 1,176 Bcf or 1,248 TBtu per year) from domestic resources for a term of 30 years beginning on the earlier of the date of first export or ten years from the date the requested authorization is granted. FME is seeking authority to export LNG to (1) any country with which the United States currently has, or in the future may enter into, a free trade agreement requiring national treatment for trade in natural gas; and (2) any country with which the United States does not have a free trade agreement requiring national treatment for trade in natural gas, 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.

As explained in the application, FME requests that the Department of Energy Office of Fossil Energy consider this application separately from the processing parameters established for non-free trade agreement applications prior to the amendment of the Deep Water Ports Act on December 20, 2012.

Enclosed is a check in the amount of $50.00 in payment of the applicable filing fee pursuant to 10 C.F.R. § 590.207. Please contact the undersigned at (504) 582-4880 if you have any questions regarding this filing.

Respectfully submitted,

David C. Landry
VP & General Manager
Freeport-McMoRan Energy LLC

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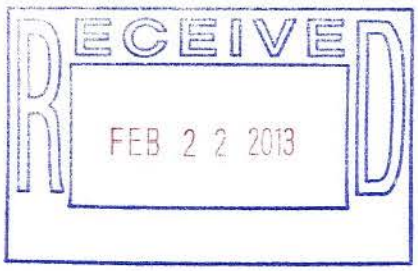

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

Freeport-McMoRan Energy LLC	)	Docket No. 13 -26- LNG

APPLICATION OF FREEPORT-MCMORAN ENERGY LLC FOR LONG-TERM, MULTI-CONTRACT AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS

David C. Landry
Freeport-McMoRan Energy LLC
1615 Poydras Street
New Orleans, LA 70112

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

Freeport-McMoRan Energy LLC	)	Docket No. 13-26-LNG

APPLICATION OF FREEPORT-MCMORAN ENERGY LLC FOR LONG-TERM, MULTI-CONTRACT AUTHORIZATION TO EXPORT LIQUEFIED NATURAL GAS TO FREE TRADE AND NON-FREE TRADE AGREEMENT NATIONS

Pursuant to Section 3 of the Natural Gas Act ("NGA"), 15 U.S.C. § 717b, and Part 590 of the regulations of the Department of Energy ("DOE"), 10 C.F.R. Part 590, Freeport-McMoRan Energy LLC ("FME") submits this application ("Application") to the DOE Office of Fossil Energy ("DOE/FE") for long-term, multi-contract authorization to export 24 million tons per annum ("MTPA") of liquefied natural gas ("LNG") (approximately equivalent to 1,176 Bcf or 1,248 trillion Btu ("TBtu") per year) produced from domestic sources for a 30-year period commencing on the earlier of the date of first export or ten years from the date the requested authorization is granted.

FME seeks authorization to export LNG from the proposed Main Pass Energy Hub™ Deepwater Port ("MPEH™ Port") to be located in federal waters in Main Pass Block 299, 16 miles offshore of Louisiana, to (1) any country with which the United States currently has, or in the future may enter into, a free trade agreement ("FTA") requiring national treatment for trade in natural gas and (2) any country with which the United States does not have a free trade agreement requiring national treatment for trade in natural gas, 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. In support of this Application, FME respectfully states the following:

I. DESCRIPTION OF THE APPLICANT AND LNG FACILITY

The exact legal name of the applicant is Freeport-McMoRan Energy LLC, which is a limited liability company formed under the laws of Delaware with its principal place of business at 1615 Poydras Street, New Orleans, Louisiana, 70112. FME is a subsidiary of McMoRan Exploration Co. ("MMR Exploration"). FME also is an initial member of Main Pass Energy Hub LLC ("MPEH LLC"), which is a limited liability company formed under the laws of Delaware with its principal place of business at 1615 Poydras Street, New Orleans, Louisiana 70112. The other initial member of MPEH LLC is United LNG, LLC, a limited liability company organized under the laws of Delaware.

FME is requesting this authorization to export LNG from the MPEH™ Port which is currently owned by FME. FME and United LNG, LP are parties to a Memorandum of Understanding ("MOU") concerning the commercial development of the MPEH™ Port. United LNG, LP is a limited partnership formed under the laws of Texas with its principal place of business at 5120 Woodway Drive, Suite 5004, Houston, Texas 77056. After the execution of the MOU, MPEH LLC was formed.

The MPEH™ Port is proposed to be located in approximately 210 feet of water at a deepwater site in the Gulf of Mexico on the Outer Continental Shelf of the United States ("OCS"), approximately 16 miles offshore from southeast Louisiana at Main Pass Block 299 ("Block 299"), specifically latitude 29°15'56" and longitude 88°45'34" (see Appendix C). The MPEH™ Port will be configured to receive, store, condition, and liquefy domestic natural gas for export as LNG. Construction of the MPEH™ Port will include modification of existing offshore structures currently owned by FME, construction of new facilities and salt dome storage caverns, and construction, installation, and operation of floating liquefaction storage and

offloading vessels ("FLVs") to be used for the on-site liquefaction and exportation of LNG from the MPEH™ Port.

More specifically, the MPEH™ Port will utilize five large existing interconnected platforms and three smaller satellite platforms. These platforms will house the gas conditioning facilities, gas metering facilities, quarters for on-site employees, and gas storage and compression equipment. In addition to the platform-based facilities, the MPEH™ Port will consist of six FLVs, each capable of producing up to 4 MTPA of LNG, for a total production capacity at the MPEH™ Port of 24 MTPA of LNG. Each FLV will be moored using a buoy system and will be capable of liquefying 537 million cubic feet per day of natural gas, storing 200,000 cubic meters of LNG, and delivering LNG to off-taking LNG carriers utilizing a ship-to-ship process. The MPEH™ Port will draw gas from the domestic market through a pipeline connecting the offshore facilities to the onshore interstate pipeline network and from off-shore gathering and transmission systems in the Gulf of Mexico. FME holds a sulphur and salt lease in Block 299, which FME will use to construct salt-dome storage caverns to store natural gas prior to liquefaction. The natural gas intake at the MPEH™ Port will not exceed 4 billion cubic feet per day ("Bcf/d").

When originally proposed as an LNG import project, a revised form of the MPEH™ Port was approved by the U.S. Maritime Administration ("MARAD") in January 2007 as a Deepwater Port for the importation and regasification of LNG, conditioning of natural gas to produce natural gas liquids, and storage of natural gas in salt caverns.[1] As part of the MARAD process, the MPEH™ import project underwent an extensive analysis that included the preparation of an Environmental Impact Statement as well as review by other agencies including

[1] Docket entry 371. USCG-2004-17696-371.

the U.S. Coast Guard, the Environmental Protection Agency, the Minerals Management Service, the U.S. Army Corps of Engineers, and the national Marine Fisheries Services, all of which resulted in a favorable Record of Decision for the project.[2]

II. COMMUNICATIONS

All communications and correspondence regarding this Application should be directed to the following persons:

David C. Landry
Freeport-McMoRan Energy, LLC
1615 Poydras Street
New Orleans, LA 70112
Phone: (504) 582-4880
Email: Dave_Landry@fmi.com

III. AUTHORIZATION REQUESTED

FME requests long-term, multi-contract authorization to export up to 24 MTPA of domestically produced LNG (equivalent to approximately 1,176 Bcf or 1,248 TBtu per year) for a 30-year period commencing upon the earlier of the date of first export or ten years from the date the requested authorization is granted. FME requests that such long-term authorization provide for export to (1) any country with which the United States currently has, or in the future may enter into, an FTA requiring national treatment for trade in natural gas; and (2) any country with which the United States does not have a free trade agreement requiring national treatment for trade in natural gas with which trade is not prohibited by United States law or policy.

FME is requesting this authorization both on its behalf and as agent for other parties who themselves hold title to the LNG at the time of export. FME will comply with all DOE/FE requirements for exports and agents as established in *Freeport LNG Development, L.P.*, DOE/FE

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[2] *Id.*

Order No. 2913, including the registration requirements.[3] When acting as agent, FME will register with the DOE/FE each LNG title holder for which FME seeks to export LNG as agent. FME will provide the DOE/FE with registration materials that include an acknowledgement and agreement by the LNG title holder to supply information necessary to permit FME to register that person or entity with DOE/FE, including (i) the LNG title holder's agreement to comply with any order issued by DOE/FE pursuant to this Application and all applicable requirements of DOE's regulations at 10 C.F.R. Part 590, including but not limited to destination restrictions; (ii) the exact legal name of the LNG title holder, state/location of incorporation/registration, primary place of doing business, and the LNG title holder's ownership structure, including the ultimate parent entity if the registrant is a subsidiary or affiliate of another entity; (iii) the name, title, mailing address, e-mail address, and telephone number of a corporate officer or employee of the LNG title holder to whom inquiries may be directed; (iv) within 30 days of execution, a copy, filed with DOE/FE under seal, of any long-term contracts, including processing agreements, that result in the export of LNG; and (v) within 30 days of execution by a person or entity required by the authorization requested herein to register a copy, filed with DOE/FE under seal, of any long-term contracts associated with the long-term supply of natural gas to the MPEH™ Port with the intent to process this natural gas into LNG for export pursuant to the authorization requested herein.[4]

The long-term authorization requested in this Application is necessary to permit Applicant to incur the substantial capital and other costs of developing the MPEH™ Port and to secure customer contracts. Terms for the use of the liquefaction and other offshore deepwater port facilities will be set forth in agreements with customers of the MPEH™ Port. These

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3 *Freeport LNG Development, L.P.*, DOE/FE Order No. 2913 (Feb. 10, 2011).

4 *Id.*

agreements are expected to be for terms that will be consistent with FME's export authorization. FME has not yet entered into such agreements given that a long-term export authorization, particularly to non-FTA countries, is required to finalize arrangements with prospective customers.

FME's affiliate MPEH LLC previously received an FTA export authorization from DOE/FE to export up to 24 mtpa of LNG from the MPEH™ Port.[5] FME now is requesting both FTA and non-FTA authorization for the same quantity of LNG as the previous application. These authorizations are meant to be coincidental rather than cumulative, and only 24 million metric tons of LNG in total will be exported in any year from the MPEH™ Port. FME will inform DOE/FE prior to any exports occurring how the 24 mtpa of LNG exports will be allocated between all export authorizations applicable to the MPEH™ Port.

IV. FEEDSTOCK GAS SOURCES

FME seeks authorization to export natural gas available in the United States natural gas supply and transmission system. The sources of natural gas for the MPEH™ Port will include the vast supplies available from the Gulf Coast producing regions, including onshore and offshore resources. The MPEH™ Port has the potential to access nine major natural gas pipelines, with indirect access to the entire national gas pipeline grid. In addition, the MPEH™ Port is strategically located on the OCS, a prolific and highly productive area. For example, FME's parent company, MMR Exploration, is one of the largest acreage holders on the OCS and is engaged in exploration and development activities with the potential to unlock over 100 trillion cubic feet of natural gas over a 200-mile area in the shallow waters of the Gulf of Mexico and onshore Louisiana. Taken together, the region's vast onshore and offshore resources

[5] *Main Pass Energy Hub, LLC*, DOE/FE Order No. 3220 (Jan. 4, 2013).

available to the MPEH™ Port through its numerous potential pipeline interconnections will provide more than sufficient gas quantities to support the proposed LNG exports over the term of the requested authorization.

Exports of natural gas directly from the OCS may be subject to the requirements of the Outercontinental Shelf Lands Act, 43 U.S.C. § 1354(b), and all such activities will be conducted in full compliance with the requirements.

Given the size of traditional natural gas resources in close proximity to the MPEH™ Port as well as the rapid growth of gas resources in the region, FME's customers will have a diverse and reliable choice of gas supplies from the most liquid natural gas market in the world.

V. PUBLIC INTEREST

FME's authorization as described herein is not inconsistent with the public interest and should be granted by DOE/FE under the individual statutory provisions that apply separately to exporting LNG to FTA and non-FTA countries.

A. FTA Countries

NGA Section 3(c), as amended by Section 201 of the Energy Policy Act of 1992 (Pub. L. 102-486), provides that:

> [T]he exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay.[6]

Under this statutory presumption, that portion of this Application that seeks to export LNG to nations with which the United States currently has, or in the future may enter into, an FTA requiring national treatment for trade in natural gas, shall be deemed to be consistent with the

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[6] 15 U.S.C. § 717b(c) (2009).

public interest and should be granted by DOE/FE without modification or delay. Indeed, DOE/FE promptly grants authorization for export to FTA nations as a matter of statutory requirement.[7]

B. Non-FTA Countries

Section 3(a) of the NGA sets forth the general standard for review of export applications:

> [N]o person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the [Secretary of Energy] authorizing it to do so. The [Secretary] *shall issue* such order upon application, *unless*, after opportunity for hearing, [the Secretary] finds that the proposed exportation or importation will not be consistent with the public interest. The [Secretary] may by [the Secretary's] order grant such application, in whole or in part, with such modification and upon such terms and conditions as the [Secretary] may find necessary or appropriate.[8]

According to the DOE/FE, "Section 3(a) of the NGA creates a rebuttable presumption that proposed exports of natural gas are in the public interest, and DOE must grant such an application unless those who oppose the application overcome that presumption."[9] To overcome this rebuttable presumption an opponent must affirmatively demonstrate that the proposal is inconsistent with the public interest.[10]

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[7] Consolidated Edison Company of New York and Orange and Rockland Utilities, Inc., DOE/FE Order No. 2894 (Dec. 21, 2010); El Paso Marketing, L.P., DOE/FE Order No. 2895 (Dec. 21, 2010); Arizona Public Service Company, DOE/FE Order No. 2893 (Dec. 17, 2010); Selkirk Cogen Partners L.P., DOE/FE Order No. 2892 (Dec. 17, 2010); Energia De Baja California, S De R. L. De C.V., DOE/FE Order No. 2867 (Oct. 19, 2010); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2833 (Sept. 7, 2010).

[8] 15 U.S.C. § 717b(a) (2006) (emphasis added). This authority has been delegated to the Assistant Secretary for Fossil Energy pursuant to Redelegation Order No. 00-002.04D (Nov. 6, 2007).

[9] *Sabine Pass Liquefaction, LLC*, DOE/FE Order No. 2961 at 28 ("Order No. 2961"); *see also Panhandle Producers and Royalty Owners Assoc. v. ERA*, 822 F.2d 1105, 1111 (D.C. Cir. 1987) ("A presumption favoring import authorization, then, is completely consistent with, if not mandated by, the statutory directive.").

[10] *Sabine Pass Liquefaction, LLC*, FE Docket 10-111-LNG, Opinion and Order Denying Request for Review Under Section 3(c) of the NGA, at 5 (Oct. 21, 2010) ("Sabine Section 3(c) Order"); *see also Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order No. 1473 (April 2, 1999) ("Section 3 creates a statutory presumption in favor of approval of an export application and the Department must grant the requested export [application] unless it determines the presumption is overcome by evidence in the record of the proceeding that the proposed export will not be consistent with the public interest.").

In evaluating the "public interest" the DOE/FE, consistent with its Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, examines whether "domestic supply shortages or domestic security needs overcome the statutory presumption that a proposed export is not inconsistent with the public interest."[11] While the Policy Guidelines deal specifically with imports, the DOE/FE has found that the principles are applicable to exports.[12] The Policy Guidelines are intended to promote free and open trade by minimizing federal government interference:

> 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.[13]

DOE/FE recently affirmed that

> this agency's review of export applications in decisions under current delegated authority has continued to focus on the domestic need for the natural gas proposed to be exported; whether the proposed exports pose a threat to the security of domestic natural gas supplies; and any other issue determined to be appropriate, including whether the arrangement is consistent with DOE's policy of promoting competition in the marketplace by allowing commercial parties to freely negotiated their own trade arrangements.[14]

As demonstrated herein, FME's application is not inconsistent with the public interest.

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[11] Sabine Section 3(c) Order at 5; Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, 49 Fed. Reg. 6,684 (Feb. 22, 1984) ("Policy Guidelines").

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

[13] Policy Guidelines at 6685.

[14] Order No. 2961 at 29.

C. Domestic Need for the Natural Gas Proposed to be Exported

The main focus of the DOE/FE's public interest analysis has been the projected domestic need for the gas to be exported. Domestic need can be measured by looking at domestic natural gas supply versus natural gas demand. DOE/FE has historically compared the total volume of natural gas reserves and recoverable resources available to be produced during the proposed export period to total gas demand during the export period to determine whether there is a domestic need for the gas to be exported.[15]

During the period of the export authorization requested by FME, U.S. reserves and recoverable resources will be far in excess of total gas demand. Multiple, independent analyses have concluded that exports will not cause a significant increase in domestic natural gas prices. Accordingly, the export authorization requested in this Application will not have a detrimental impact on the domestic supply of natural gas and, therefore, is not inconsistent with the public interest.

i) Domestic natural gas supply

The U.S. natural gas supply is more than adequate to meet both the future U.S. domestic demand and FME's proposed export volumes over the term of the authorization sought herein. As a result of recent advances in drilling technologies and development of shale gas plays those technologies enable, U.S. domestic gas production and reserves have experienced rapid growth. Due primarily to increased shale production, dry gas production in 2013 is estimated to be 24 Tcf, a 13% increase from 2010.[16] This increase in shale gas production has more than offset declines in production from conventional fields, and domestic gas production has continued to

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[15] *Phillips Alaska Natural Gas Corp. and Marathon Oil Co.*, DOE/FE Order No. 1473 at 29, 40, 46.

[16] U.S. Energy Information Administration, *Annual Energy Outlook 2013 Early Release* (Jan. 2013), available at http://www.eia.doe.gov/forecasts/aeo/tables_ref.cfm. ("EIA Outlook 2013")

expand despite a decrease in the number of wells drilled.[17] The discovery of new shale resources continues, which will serve to increase production capacity.

The growth in gas production has outstripped the growth in demand for gas. Gas consumption in the U.S. in 2012 was estimated at approximately 25.63 Tcf, slightly more than was produced.[18] However, the U.S. Energy Information Administration ("EIA") predicts that natural gas production will grow more rapidly than natural gas consumption, resulting in "more than enough [production] to meet domestic needs for consumption, which allows for exports."[19]

As shale resources have become an increasingly viable source of production, expanded exploration and drilling activity has increased producers' knowledge of known shale reserves and led to the discovery of new reserves. This has directly affected domestic resource estimates, which have greatly increased in recent years. A number of different groups have published reports attempting to identify the total recoverable shale gas resources in the United States. The EIA estimates shale gas resources to total 482 Tcf, but other groups have much higher estimates.[20] A recent Rice University Report estimates recoverable shale resources at 521 Tcf; the Massachusetts Institute of Technology estimates 650 Tcf, and the Potential Gas Committee has estimated 687 Tcf from shale resources.[21] When considering total U.S. resources, not just shale reserves, the EIA has estimated that dry natural gas resources in the U.S. total 2,203 Tcf.[22]

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17 "U.S. total natural gas production increased from about 50.2 Bcfd in May 2006 to about 64.7 Bcfd in May 2012, even as overall rig counts fell from about 1380 to 595." Navigant Consulting, Inc. *Southern LNG Export Project Market Analysis Study,* included as Appendix A to the *Application of Southern LNG Company, L.L.C. for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries* submitted in FE Docket No. 12-100-LNG on August 31, 2012, at p. 15 ("Navigant Study").

18 EIA Outlook 2013 Early Release.

19 U.S. Energy Information Administration, *Annual Energy Outlook 2012*, at p. 92 (Jun. 2012), available at http://www.eia.doe.gov/forecasts/aeo/tables_ref.cfm. ("EIA Outlook 2012").

20 EIA Outlook 2012 at Table 15.

21 *See,* Navigant Study at p. 14.

22 EIA Outlook 2012 at Table 9.2.

Navigant Consulting's updated analysis has estimated the dry gas resources at 2,207 Tcf.[23] Based on U.S. demand in 2011 and the EIA's estimate of total resources, the U.S. has enough gas resources to meet demand for more than 90 years, a calculation that does not include the possibility for new shale gas discoveries.[24] The EIA's calculation similarly does not take into consideration:

- potential advances in processes or technology that will result in higher recoverability ratios per well, or improved economics,
- other discoveries such as MMR Exploration's sub-salt ultra-deep resources or
- new or improved energy sources that will reduce the demand for natural gas.

ii) Domestic natural gas demand

Domestic natural gas demand is the second component in the DOE/FE's analysis. The export of domestic LNG, as proposed by FME, should be considered to be in the public interest as U.S. natural gas available for supply far exceeds demand. The EIA estimates that domestic natural gas demand will grow from 25.63 Tcf per year in 2012 to 28.71 Tcf per year in 2035.[25] The EIA further estimates that cumulative domestic gas consumption from 2012 through 2035 will be 643 Tcf.[26]

The export authorization requested by FME hereunder would increase demand by a maximum of 1.46 Tcf per year. Recognizing, however, that there are other applications to export domestic LNG pending before DOE and that other applicants may seek authorizations, a number of groups, including Navigant Consulting, Deloitte, and the Brookings Energy Security Initiative have considered the cumulative effects of LNG exports on natural gas demand and pricing.

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23 Navigant Study at p. 5.
24 Navigant Study at p. 13.
25 EIA Outlook 2013 Early Release.
26 EIA Outlook 2013 Early Release.

Navigant considered two scenarios of relevance to FME's application, an "Aggregate Exports Case" and a "High Demand Base Case." The Aggregate Exports Case assumes a total of 7.7 Bcf per day of LNG exports, split between Gulf Coast exports (4.7 Bcf/day), Pacific Coast exports (2.5 Bcf/day), and Atlantic Coast (0.5 Bcf/day) an assumption that could reflect the MPEH™ Port operating at full capacity. The High Demand Base Case assumes a total of 7.2 Bcf/day of LNG exports (similar to the Aggregate Exports Case without the Atlantic Coast exports) but including increased domestic demand for natural gas, such as through natural gas vehicles.[27] Deloitte also prepared a study that considered a number of export scenarios, including exports of 1.33 Bcf/day, 3 Bcf/day, 6 Bcf/day, 9 Bcf/day, and 12 Bcf/day.[28] FME believes that the analyses from Navigant and Deloitte are applicable to the proposed MPEH™ Port because it will be located near traditional and shale reserves in the Gulf of Mexico in a location where other projects are also being considered.

Navigant explicitly considered the impact that LNG exports would have on U.S. gas production. Under the two scenarios most applicable to FME, U.S. gas supply would increase slightly more than would be expected without exports. In the Aggregate Exports Case, production would increase from 68.2 Bcf/day in 2012 to 84.1 Bcf/day in 2035, versus to 83.5 Bcf/day without exports, less than a 1% increase. In the High Demand Base Case, U.S. production would increase to 88.3 Bcf/day by 2035, about a 5% increase.[29] As a result, Navigant concludes that LNG exports would have a mild stimulating effect on U.S. natural gas production. The EIA, however, expects that "about 63 percent, on average, of the increase in exports . . . is

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[27] Navigant Study at p. 40.

[28] Deloitte MarketPoint, *Analysis of Economic Impact of LNG Exports from the United States*, included as Appendix F to the *Application for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries* submitted by Excelerate Liquefaction Solutions I, LLC in FE Docket No. 12-146-LNG on October 5, 2012 ("Deloitte Study").

[29] Navigant Study at pp. 49, 54.

accounted for by increased production."[30] A study by the Energy Security Initiative at the Brookings Institute suggests that LNG exports "will come from new natural gas production as opposed to displacing existing production from domestic consumers."[31]

Thus, the U.S. has more than enough supply to support domestic gas needs and proposed LNG export volumes, the primary supply consideration in Order No. 2961.[32] Moreover, due to the long construction lead time for LNG export facilities, producers will be able to anticipate new demand and ramp up production in advance. Thus, commencement of LNG exports will not shock the market in any way. As a result, natural gas demand to meet LNG export needs will have a leveling effect on the natural gas market as a whole, providing insulation against supply and demand shocks, as discussed below.

D. Impact on U.S. Natural Gas Market Prices

Once it is determined that an export will not jeopardize supply to domestic needs during the term of the export, the public interest test of Section 3 of the NGA is met, regardless of the impact of the proposed export on domestic prices. As the Policy Guidelines make clear, it is not the policy of the federal government to manipulate domestic energy prices by approving or disapproving import and export applications.[33] U.S. policy is that markets, and not the government, should allocate resources, determine supply and demand, and set prices. The analyses performed by, the EIA, Navigant and Deloitte show that the effect of LNG exports on natural gas prices will be limited and not sufficient to merit a determination that the MPEH™ Port is not in the public interest.

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30 EIA Study at p. 10.

31 Charles Ebinger, Kevin Massy, Govinda Avasarala, *Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas*, Energy Security Initiative at Brookings, at p. 37 (May 2012) ("Brookings Study").

32 Order No. 2961 at 31.

33 *See supra* note 13 and accompanying text.

The American Energy Outlook 2013 Early Release actually lowers price projections going forward compared to the 2011 projections due to increases in natural gas production. The EIA now projects Henry Hub prices of $4.13 and $6.32 (in 2011 dollars per MMBtu) for 2020 and 2035, respectively, even while incorporating projected exports of up to 1.46 Tcf per year.[34] The prices from the 2011 edition, were $5.05 and $7.07 for the same periods (albeit in 2009, not 2011 dollars).[35]

Navigant forecast the effects of LNG exports under various scenarios on pricing at two major market hubs – Henry Hub and Transco Zone 4 – and under two scenarios. Because of the relative proximity of the MPEH™ Port to Henry Hub relative to Transco Zone 4 and its role as the preeminent trading point in the United States, Henry Hub is the more predictive point for consideration here. Under the Aggregate Exports Case, Navigant forecasts that LNG exports would cause a limited increase in Henry Hub prices of about 4.4%.[36] Prices at Henry Hub would increase slightly ($0.12) in 2016 when exports commence compared to the base case, and would be $0.27 higher than the base case in 2020 ($4.51 to $4.88).[37] Around 2020, Henry Hub prices would move above $5.00 for the first time, and projections to 2025 and 2035 show Henry Hub prices $0.39 and $0.59 above the base case as a result of the LNG exports.[38] By 2035, Navigant predicts that Henry Hub prices under the Aggregate Exports Case would be $7.04 versus $6.45 under the base case.[39] In Navigant's High Demand Base Case, Henry Hub prices would increase

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34 EIA Outlook 2013 Early Release.

35 U.S. Energy Information Administration, *Annual Energy Outlook 2011* (Jun. 2011), available at http://www.eia.doe.gov/forecasts/aeo/tables_ref.cfm.

36 Navigant Study at p. 3.

37 *Id.*

38 *Id.*

39 *Id.*

to $3.92 in 2016 and $4.98 in 2020.[40] Prices are expected to remain below $5.00 through 2021 and reach a peak of $7.64 in 2035.[41]

Deloitte forecasts similar price effects at Henry Hub over time depending on the level of exports. Under the 6 Bcf/day scenario, Deloitte expects that the Henry Hub price would be 4.0% higher in 2037 compared to the base case with no exports.[42] At 9 Bcf/day and 12 Bcf/day of exports, the effect on Henry Hub prices would be 5.5% and 7.7%, respectively.[43] Notably, Deloitte forecasts smaller percentage increases in "Average U.S. Citygate" prices and "New York" prices over the same period.[44] Deloitte ascribes the increased impact on prices at Henry Hub to the fact that the majority of the export activity will result from projects on the Gulf Coast, which would include FME. The DOE/FE has previously found that a modest increase in Henry Hub prices due to LNG exports is not contrary to the public interest and can be outweighed by the benefits of an LNG export project.[45]

The effect of LNG exports on natural gas prices for consumers will be somewhat less compared to the effect at Henry Hub. As an initial matter, consumer prices reflect transportation and, sometimes, distribution. Even if the absolute change in natural gas prices to consumers is the same as at Henry Hub, the percentage change will be lower simply because consumers already pay a price higher than Henry Hub.[46] In fact the EIA found that the percentage change in prices to consumers would be "significantly lower."[47] The absolute increase in prices to consumers may not equal the absolute increase at Henry Hub, either. Deloitte predicts, for

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40 *Id.* at p. 5.
41 *Id.*
42 Deloitte Study at p. 3.
43 *Id.*
44 *Id.* (forecasting increases of 4.3% or less at the U.S. Citygate and New York through 2037).
45 Order No. 2961 at 30.
46 Energy Information Administration, *Effect of Increased Natural Gas Exports on Domestic Energy Markets*, at p. 7 (Jan. 2012), available at http://http://www.eia.gov/analysis/requests/fe/pdf/fe_lng.pdf.
47 *Id.*

example, that at 6 Bcf/day of exports, city gate prices will increase $0.15 and New York City prices will increase $0.14 compared to an increase of $0.26 at Henry Hub.[48] Similar relative price differences are expected at higher export levels as well.[49] Finally, Brookings notes that the development of the Marcellus Shale, in particular, will help insulate the Northeast U.S., where gas prices are typically highest, from price increases caused by exports.[50]

While LNG exports will result in limited increases in the price for natural gas, the exports will have a positive effect on prices by limiting price shocks. LNG exports will, as discussed above, stimulate increased production of natural gas and construction of natural gas transmission facilities. This increased infrastructure will allow the industry and market to quickly respond to any disruptions in the supply chain, such as due to a natural disaster, quickly by diverting supply from exports to domestic uses. One key factor in this is that liquefaction facilities, such as the MPEH™ Port, can alter the quantity of natural gas used for liquefaction on a day-to-day basis, responding immediately if prices in the U.S. shift such that the gas is more valuable in the domestic market than as LNG exports. Such a response could take the form of customers of FME choosing to cancel cargoes in order to turn gas back to the domestic market or by FME utilizing reserve gas in its storage facilities to meet its LNG supply obligations rather than purchasing gas in the market.

The MPEH™ Port, in particular, could function as a type of strategic reserve for natural gas by virtue of its underground salt dome storage. Should some unexpected event, such as a hurricane, disrupt gas production, FME would be able to quickly respond by moving gas out of

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[48] Deloitte Study at p. 10.

[49] At 9 Bcf/day of exports, Deloitte forecasts changes of $0.22 and $0.23 at the city gas and New York, respectively, and $0.36 at Henry Hub. At 12 Bcf/day, the forecast changes increase to $0.30, $0.29, and $0.50 at the city gate, New York, and Henry Hub, respectively. Deloitte Study at p. 10.

[50] Brookings Study at p. 32.

storage and into the interconnected interstate and offshore pipelines. By serving as, effectively, a short-term supply source, FME would help reduce the impact of supply shocks over a limited period until production can resume at a more normal level.

Increased production of natural gas, as would result of LNG exports, would also move production to a flatter part of the supply curve.[51] Thus, changes in demand would have a smaller effect on price and supply than under scenarios with no LNG exports. Long-term LNG exports will also limit volatility in the market because exporters will need to acquire substantial volumes of gas on a daily basis to support liquefaction activities. This stable demand means that less of the natural gas market would be subject to changes in demand resulting from, for example, weather.

Some parties opposed to LNG exports have asserted that exports would result in the convergence of domestic natural gas prices with international prices, but no economic analysis performed to date has found such a convergence to be a possibility. Michael Levi of the Council on Foreign Relations assessed various scenarios that could lead to convergence but concluded that his examination "reinforces the real possibility that prices will continue to diverge for the indefinite future."[52] Brookings similarly expects that, while U.S. exports could impact the pricing structure of international LNG contracts, a number of factors will limit that impact, including existing long-term contracts, the limited volumes of U.S. supply compared to world-wide demand, the potential for rebounding U.S. prices to limit exports, and increased international demand offsetting increases in supply from U.S. exports.[53] In Asian markets, Facts

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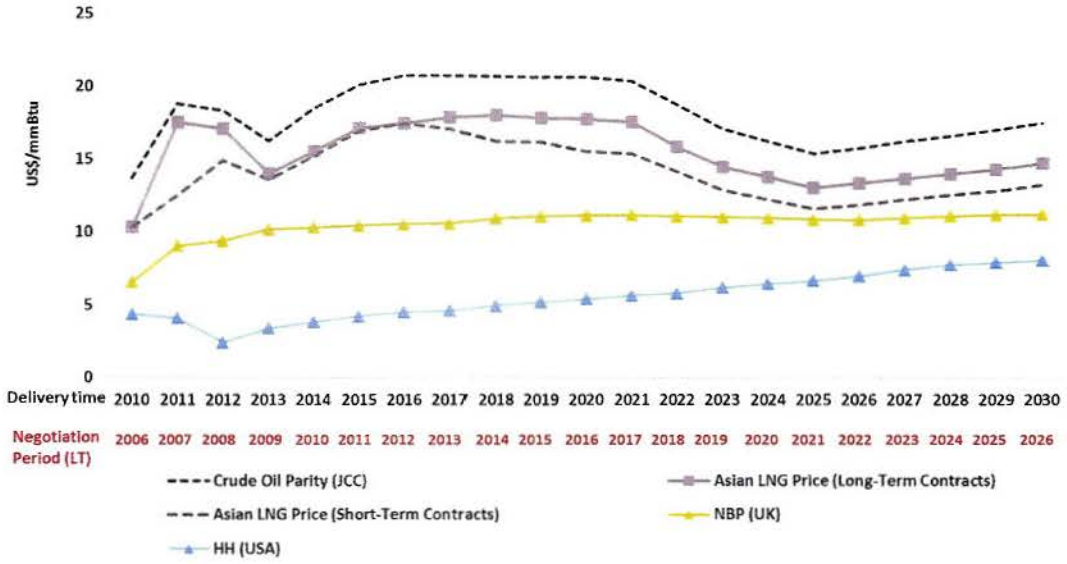
51 *Id.* at p. 16.

52 Michael Levi, *A Strategy for U.S. Natural Gas Exports*, prepared for The Hamilton Project, at p. 8 (Jun. 2012), available at http://www.brookings.edu/research/papers/2012/06/13-exports-levi ("Hamilton Study").

53 Brookings Study at pp. 38-41.

Global Energy expects prices to stay at least $5 above Henry Hub through at least 2030.[54] The DOE/FE also found in Order No. 2961 that "the proposed export activity is unlikely to alter the pricing mechanism for domestic natural gas production."[55]

Projected Price of New Asian LNG Contracts vs HH, NBP, and JCC (US$2011)



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The clear conclusion from these economic analyses is that LNG exports will not have an impact on natural gas prices in the U.S. great enough to overcome the presumption that exports are in the public interest. The effect of even a large amount of LNG exports (12 Bcf/day) would be limited on prices at Henry Hub and even smaller at city gates. The increased prices are, however, balanced by the positive effects of exports, including insulation of natural gas prices from price shocks. Moreover, increased natural gas exports, as discussed below, will have

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54 Robert Smith, *Asian Natural Gas: A Softer Market Is Coming*, Facts Global Energy, Aug. 23, 2012, available at http://www.fgenergy.com/?page=article_type&action=read&id=17.

55 Order No. 2961 at 34.

beneficial effects for the U.S. economy through construction and maintenance expenditures, new job creation, and the stimulation of increased natural gas production, although those effects may be muted depending on whether exports spur additional gas production (as predicted by the EIA) or not (as predicted by Navigant). LNG exports will also help reduce the U.S. trade imbalance, which will further help the economy. Potential natural gas price increases resulting from exports are not large enough, and are sufficiently offset by the resulting benefits, as to not render exports not in the public interest.

E. Economic Benefits

The requested authorization will benefit local, regional and national economies and is in the public interest. The proposed export of LNG would allow natural gas that might otherwise be shut-in to be sold into the global LNG market, spurring the development of new natural gas resources that might not otherwise make their way to market. The NERA study concluded that "the U.S. would experience net economic benefits from increased LNG exports" and that "U.S. economic welfare consistently increases as the volume of natural gas exports increased."[56] Despite assuming constant employment, which dramatically understates the benefits to the U.S. economy from new jobs in the natural gas industry, the NERA Study demonstrates that LNG exports are beneficial and should be encouraged.

The development of new resources creates new jobs and new opportunities for American workers and is consistent with President Obama's National Export Initiative signed in 2010.[57] The President noted that "[a] critical component of stimulating economic growth in the United States is ensuring that U.S. businesses can actively participate in international markets by increasing their exports of goods . . . . Improved export performance will, in turn, create good

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[56] NERA Study at 6.

[57] Exec. Order No. 13534, 75 Fed. Reg. 12433 (March 11, 2010).

high-paying jobs."[58] The National Export Initiative has the goal of doubling exports by helping businesses overcome hurdles to entering new export markets, assisting with financing and pursuing a government-wide approach to export advocacy abroad.[59] In his 2011 State of the Union Address, the President stated:

> To help businesses sell more products abroad, we set a goal of doubling our exports by 2014 – because the more we export, the more jobs we create here at home. Already, our exports are up. . . . Now, before I took office, I made it clear that we would enforce our trade agreements, and that I would only sign deals that keep faith with American workers and promote American jobs. That's what we did with Korea, and that's what I intend to do as we pursue agreements with Panama and Colombia and continue our Asia Pacific and global trade talks.[60]

Exporting natural gas that is not needed in the United States promotes the President's pro-export policies, while providing a much needed boost to local, regional, and national economies through resource development, an enhanced tax base, job creation and increased overall economic activity. An expansion in available markets for natural gas supplies will have a ripple effect throughout the economy by creating additional employment opportunities, which the DOE/FE has found to be a significant public benefit of LNG exports.[61] For example, Levi estimates that 6 Bcf/d of exports would generate economic surplus of $2.7 to $3.2 billion annually and result in a net increase in jobs of approximately 60,000 along the supply chain.[62]

Based on the metrics in a recent report by IHS Global Insight, the utilization of 3.8 Bcf/d of natural gas will result in the creation of 20,140 direct jobs averaging $51 per hour, 33,820 indirect industry support jobs averaging $35.15 per hour and 53,960 economy wide jobs paying

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58 *Id.*

59 *Id.*

60 President Barack Obama, State of the Union Address (Jan. 25, 2011), *transcript available at* http://www.whitehouse.gov/the-press-office/2011/01/25/remarks-president-state-union-address.

61 Order No. 2961 at 37-38.

62 Hamilton Study at pp. 14-15.

an average of $23.07 per hour.[63] During the 5-year build phase, it is estimated that the MPEH™ Port will create about 3,000 to 4,000 jobs. Additionally, upon full operation, approximately 250 to 500 people will be employed on-site. This level of job creation will provide a significant economic impact on the local, state and national economy. A corollary to the creation of these jobs will be the additional taxes paid by the MPEH™ Port and associated workforce.

The MPEH™ Port should be expected to provide economic benefits on a similar level to those expected from other facilities, which benefits will far outweigh any limited effect that LNG exports would have on domestic natural gas prices during a period of abundant supply. Gulf Coast LNG Exports estimated that its project would lead to the creation of 34,000 to 42,000 jobs and involve direct expenditures of $12 billion.[64] Excelerate forecasted the creation of 3,872 jobs annually and over $2 billion in labor income, value added, output, and taxes.[65] Freeport LNG, in its application for export authorization, cited the creation of 17,000 to 21,000 new domestic jobs and total economic benefits of $3.6 to $5.2 billion annually.[66]

The MPEH™ Port will provide additional benefits by utilizing existing offshore pipeline infrastructure and encouraging the continued build-out of infrastructure to support new natural gas production. With declining production in the Gulf of Mexico and increasing shale gas production reducing exploration in the area, the vast offshore natural gas pipeline network is experiencing declining gas flow. Because the MPEH™ Port will pull gas supplies from a wide network of both onshore and offshore sources, these offshore pipelines will be critical to

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63 IHS Global Insight, *America's New Energy Future: The Unconventional Oil and Gas Revolution and the US Economy, Volume 1: National Economic Contributions* (Oct. 2012), at pp. 28-31. Payscales are based on Bureau of Labor Statistics averages.

64 Black & Veatch, *Economic Impacts of the Lavaca Bay LNG Project*, included as Appendix E to the *Application for Long-Term, Multi-Contract Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries* submitted by Excelerate Liquefaction Solutions I, LLC in FE Docket No. 12-146-LNG on October 5, 2012, at p. 32 ("Black & Veatch Study").

65 *Id.* at p. 30.

66 *Id.* p. 32.

delivering feedstock gas, and FME represents a potential demand source for such pipelines. The MPEH™ Port will also encourage offshore producers and transporters to maintain their federal leases, which is in the public interest.

Granting the requested authorization would positively impact the U.S. balance of trade. In 2011, the U.S. trade deficit was $559.9 billion, an increase of $65.1 billion from the 2010 figure.[67] Depending on the price of gas, exports from the MPEH™ Port could reduce the trade imbalance by approximately $12 billion per year. The DOE/FE, in approving export applications, has acknowledged the positive impact that LNG exports can have on the balance of trade with destination countries.[68] While processing natural gas in preparation for exports, FME will derive ethane, propane and other liquids condensate which will further help the U.S. balance of trade by increasing domestic supply and thus reducing imports. In Order No. 2961, the DOE/FE found that a facility exporting 803 Bcf of gas per year would produce 46.7 million barrels per year of liquids and improve the trade balance by $1.7 billion annually.[69] The MPEH™ Port, by analogy, should produce 68.3 million barrels of liquids and improve the balance of trade by approximately $2.5 billion annually by offsetting imports. These domestically produced natural gas liquids will be of particular benefit to chemical manufacturers that use these liquids as chemical feedstocks.[70]

Moreover, consistent with the aims of the National Export Initiative and the DOE's policy of "promoting competition in the marketplace by allowing commercial parties to freely

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[67] Bureau of Economic Analysis, U.S. Department of Commerce, *U.S. International Trade in Goods and Services*, (Oct. 11. 2012), *available at* http://www.bea.gov/newsreleases/international/trade/trad_time_series.xls.

[68] *See, e.g.*, Order No. 2961 at 30; *ConocoPhillips Company*, FE Docket No. 09-92-LNG, Order No. 2731 at 10 (Nov. 30, 2009); *Cheniere Marketing, Inc.*, FE Docket No. 08-77-LNG, Order No. 2651 at 14 (June 8, 2009) ("[M]itigation of balance of payments issues may result from a grant of the [export] application.").

[69] Order No. 2961 at 35.

[70] Hamilton Study at p. 25.

negotiate their own trade arrangements,"[71] the export of LNG will help to improve economic trade and ties between the U.S. and the destination countries, which could include key industrialized nations in Europe and Asia, as well as developing nations in Asia, South America, the Middle East, and the Caribbean.

Authorizing exports to non-FTA countries also is consistent with U.S. obligations under the General Agreement on Tariffs and Trade ("GATT"). According to Levi, Article IX of the GATT "prohibits sustained quantitative restrictions on energy exports unless they are related 'to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.'"[72] A policy of restricting exports in the face of plentiful supply for the purposes of lowering domestic prices and increasing domestic consumption would be the opposite of what the GATT requires. Restrictions on exports could also bring the U.S. in conflict with its NAFTA partners. Export projects in Canada and Mexico would likely result in the export of U.S.-produced natural gas in light of the highly integrated nature of the North American market. In such a scenario, the U.S. would face the choice of trying to prevent such exports or indirectly participating in exports without seeing any of the benefits. FME believes that honoring existing U.S. trade agreements is in the public interest and exporting natural gas would function to promote free and open trade.

Beyond meeting U.S. trade obligations, LNG exports could have wider geopolitical benefits as well. Increased LNG supplies could help to reduce European reliance on Russian natural gas supplies, and, in fact, Brookings asserts that "Russia's dominant position in the European gas market is being eroded by the increased availability of LNG."[73] U.S. exports may

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71 *Cheniere Marketing, Inc.*, FE Docket No. 08-77-LNG, Order No. 2651 at 11 (June 8, 2009).
72 Hamilton Study at p. 18.
73 Brookings Study at p. 42.

also be able "to provide a degree of increased energy security and pricing relief to LNG importers" in Asia, particularly, as discussed above, by helping to decouple LNG prices from oil prices.[74] Finally, Brookings notes that U.S. supplies would benefit the global LNG market by representing "a source of predictable natural gas supply that is relatively free from unexpected production or shipping disruption" such as a blockade or attack on Qatar's LNG facilities by Iran.[75] While LNG exports would not serve as a direct tool of the U.S. government in foreign relations because the government cannot direct where individual cargoes would go, broader LNG supply diversity would have benefits for U.S. allies and interests in various sectors of the globe.

F. Environmental Benefits

LNG export can have significant environmental benefits as natural gas is cleaner burning than other fossil fuels. According to the U.S. Environmental Protection Agency, compared to the average air emissions from coal-fired generation, natural gas-fired generation produces half as much carbon dioxide, less than a third as much nitrogen oxides, and one percent as much sulfur oxides at the power plant.[76] Accordingly, an increased supply of natural gas made possible through LNG export can help countries break their dependence on less environmentally friendly fuels.[77] Levi concurs that "natural gas is . . . likely to displace coal" in the amount of "approximately 15 million tons of reduced global emissions for each billion cubic feet of daily natural gas exports."[78] Levi finds that the climate change damages that would be avoided could total $2 billion per year and reduce greenhouse gas emissions from energy use by 0.3% relative

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74 *Id.* at p. 43.
75 *Id.*
76 *See* http://www.epa.gov/cleanenergy/energy-and-you/affect/natural-gas.html.
77 Order No. 2961 at 37.
78 Hamilton Study at p. 17.

to 2008. In the case of FME, Levi's figures correlate to a reduction of 48.3 million tons in emissions each year.

VI. ENVIRONMENTAL IMPACT

MARAD, in coordination with the U.S. Coast Guard, will act as the lead agency for environmental review of the MPEH™ Port, with DOE acting as a cooperating agency. FME initiated discussions with MARAD in October 2012 regarding development of a deepwater port application for the MPEH™ Port, and this application will include a complete environmental review of the project. The MPEH™ LNG import project previously underwent an extensive analysis under the National Environmental Policy Act ("NEPA"), including preparation of a full Environmental Impact Statement, and a review by other agencies. This analysis resulted in a favorable Record of Decision issued by MARAD for the project.[79] FME is performing scoping studies to determine those federal, state or local agencies that need to be involved and the additional studies that need to be performed in conjunction with the construction of the MPEH™ Port, including the FLVs.

FME requests that the DOE/FE issue the export authorization to non-FTA countries conditioned on MARAD's completion of the NEPA review and approval of the facility construction. The DOE/FE routinely issues orders with such a condition.[80]

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[79] Docket entry 371. USCG-2004-17696-371.

[80] *See e.g.*, Order No. 2961 at 41 ("the authorization issued in the instant proceeding will be conditioned on the satisfactory completion of the environmental review process in FERC Docket No. PF10-24-000 and on issuance by DOE/FE of a finding of no significant impact or a record of decision pursuant to NEPA"); *Yukon Pacific Corp.*, ERA Docket No. 87-68-LNG, Order No. 350 (Nov. 16, 1989) ("The DOE believes that energy projects can and must be undertaken consistent with environmentally acceptable practices. To ensure this result, the DOE is attaching a condition to the export approval that all aspects of the export project must be undertaken in accordance with the appropriate environmental review process and must comply with any and all preventative and mitigative measures imposed by Federal or State agencies."); *see also Rochester Gas and Electric Corp.*, FE Docket No. 90-05-NG, Order No. 503 (May 16, 1991).

VII. REQUEST FOR SEPARATE TREATMENT

FME submits that good cause exists to consider this Application separately from the processing parameters established by DOE/FE for non-FTA applications. Although MARAD does not have a process equivalent to FERC's pre-filing process, FME has been in discussions with MARAD since July, 2012. The project submitted a Letter of Intent to Submit Application to MARAD on October 3, 2012. However, MARAD's jurisdiction to license on LNG export facility under the Deepwater Ports Act was not clear prior to the enactment of amendments to the Deepwater Ports Act on December 20, 2012. Following discussions with DOE/FE, FME was unable to submit a non-FTA application until the amendments were enacted. Thus, this Application should not be subject to the previously established processing parameters.

VIII. APPENDICES

The following appendices are included with this Application:

Appendix A	Verification
Appendix B	Opinion of Counsel
Appendix C	Location of Main Pass Energy Hub^{tm} Deepwater Port

VIII. CONCLUSION

WHEREFORE, for the reasons set forth above, FME respectfully requests that the DOE/FE issue an order granting FME long-term authorization to export up to 24 million tons per annum (approximately 1,176 Bcf or 1,248 TBtu per year) for a term of 30 years of domestic LNG to (1) any country with which the United States currently has, or in the future may enter into, a free trade agreement ("FTA") requiring national treatment for trade in natural gas (2) any country with which the United States does not have a free trade agreement 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.

As demonstrated herein, the authorizations requested are not inconsistent with the public interest and, accordingly, should be granted pursuant to Section 3 of the Natural Gas Act.

Respectfully submitted,

David C. Landry
VP & General Manager
Freeport-McMoRan Energy LLC

Dated February 22, 2013

APPENDIX A

VERIFICATION

VERIFICATION

County of [WASHINGTON]
)
State of [DC]
)

BEFORE ME, the undersigned authority, on this day personally appeared David C. Landry, who, having been by me first duly sworn, on oath says that he is duly authorized to make this Verification on behalf of Freeport-McMoRan Energy LLC; that he has read the foregoing instrument and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

David C Landry

SWORN TO AND SUBSCRIBED before me on the 22nd day of February, 2013.

Sanjay Shukla
Notary Public

District of Columbia: SS

Subscribed and sworn to before me, in my presence,
this 22nd day of February, 2013
by David Landry
Sanjay Shukla, Notary Public
My Commission Expires NOV. 30th, 2016

APPENDIX B

OPINION OF COUNSEL

February 20, 2013

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

RE: Freeport-McMoRan Energy LLC
Application for Long-Term Authorization to Export Liquefied Natural Gas

Dear Mr. Anderson:

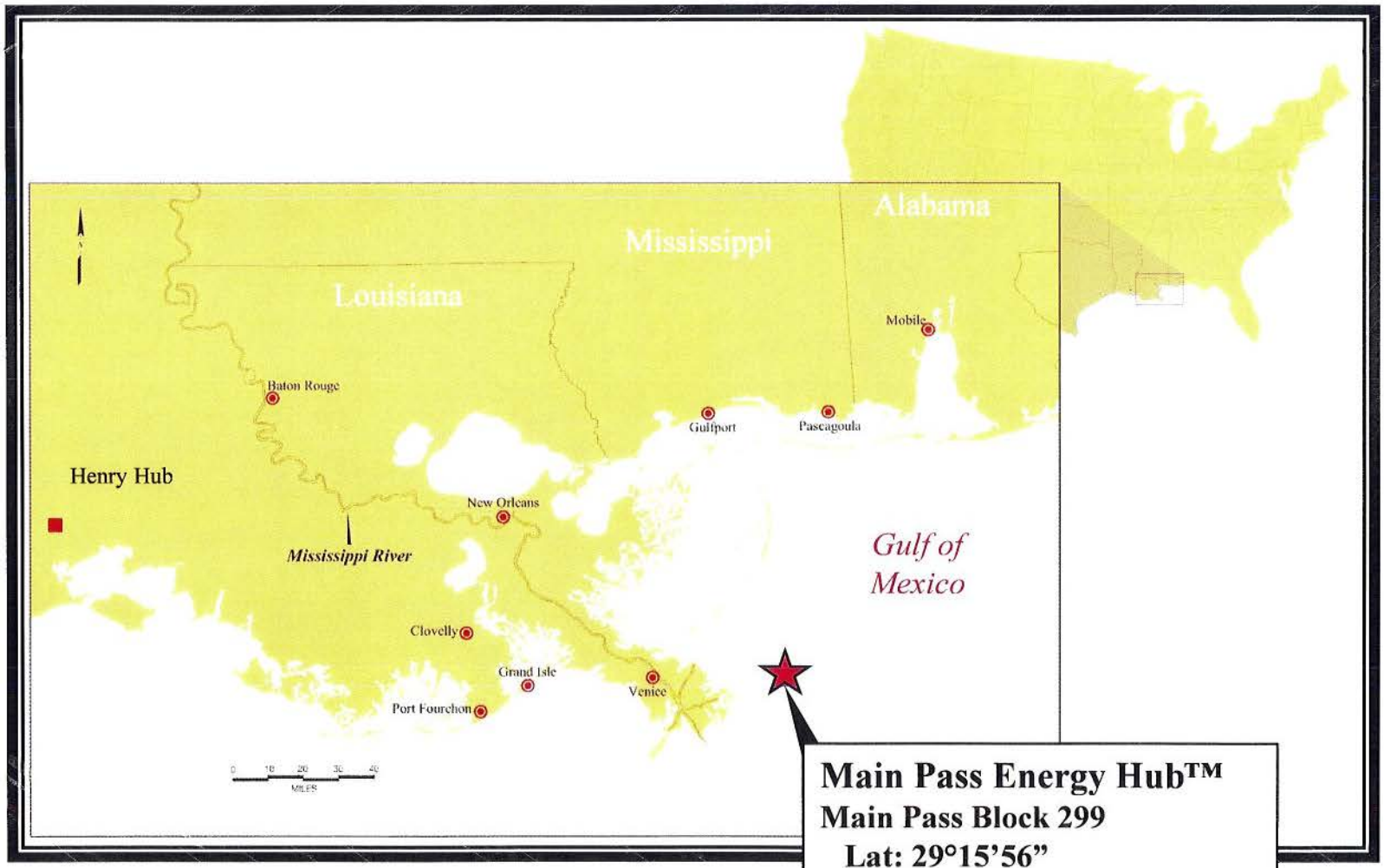
This opinion of counsel is submitted pursuant to Section 590.202(c) of the regulations of the U.S. Department of Energy, 10 C.F.R. § 590.202(c) (2012). The undersigned is counsel to Freeport-McMoRan Energy LLC. I have reviewed the corporate documents of Freeport-McMoRan Energy LLC and it is my opinion that the proposed export of natural gas as described in the application filed by Freeport-McMoRan Energy LLC to which this Opinion of Counsel is attached as Appendix B, is within the limited liability company powers of Freeport-McMoRan Energy LLC.

Respectfully submitted,

David M. Hunter
Counsel

APPENDIX C

LOCATION OF MAIN PASS ENERGY HUB™ DEEPWATER PORT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Mississippi
Louisiana
Mobile
Baton Rouge
Gulfport
Pascagoula
Henry Hub
New Orleans
Mississippi River
Gulf of
Mexico
Clovelly
Grand Isle
Venice
Port Fourchon
0 10 20 30 40
MILES
Main Pass Energy Hub™
Main Pass Block 299
Lat: 29°15'56"
Lon: 88°45'34"