UNITED STATES OF AMERICA
BEFORE THE DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

In the Matter of	)	~~**FE Docket No. 15-___-NG**~~
	)	**FE Docket No. 15-33-LNG**
Bear Head LNG Corporation	)	
Bear Head LNG (USA), LLC	)	
	)	

APPLICATION FOR LONG-TERM AUTHORIZATIONS TO EXPORT NATURAL GAS TO CANADA AND TO EXPORT LIQUEFIED NATURAL GAS FROM CANADA TO FREE TRADE AGREEMENT AND NON-FREE TRADE AGREEMENT NATIONS

TABLE OF CONTENTS

Page

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Pursuant to Section 3 of the Natural Gas Act ("NGA")[1] and Part 590 of the Department of Energy's ("DOE") regulations,[2] Bear Head LNG Corporation ("Bear Head Corp.") and Bear Head LNG (USA), LLC ("Bear Head (USA)"; and together with Bear Head Corp., "Bear Head LNG") hereby request that DOE, Office of Fossil Energy ("DOE/FE") grant long-term, multi-contract authorizations for Bear Head LNG to engage in exports of up to:

(i) 440 billion standard cubic feet ("Bcf") per year ("Bcf/y") (or approximately 1.2 Bcf per day ("Bcf/d"))[3] of natural gas by pipeline[4] to Canada (the "NG Authorization"); and

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1 15 U.S.C. § 717b (2012).

2 10 C.F.R. Part 590 (2014).

3 The requested natural gas export annual quantity is calculated based on the natural gas feedstock required to support the production of up to 8 million metric tons per annum ("mtpa") of liquefied natural gas ("LNG"), assuming a heat conversion factor of 49.7 Bcf/y per mtpa, and a 10 percent combined factor for pipeline losses and fuel consumption. In this regard, approximately 42.4 Bcf/y of the natural gas volume proposed to be exported will be consumed in Canada and not exported as LNG.

4 Bear Head LNG anticipates that the natural gas will be exported at the U.S.-Canada border at a point near Calais, Maine/St. Stephen, New Brunswick, on the Maritimes Northeast Pipeline ("M&NP"). The M&NP is operated by Maritimes & Northeast Pipeline, L.L.C. ("Maritimes") (in the United States) and by its Canadian pipeline affiliate, Maritimes & Northeast Pipeline Limited Partnership (in Canada). The M&NP is an existing 690-mile-long cross-border pipeline (with 338 miles in the United States and 352 miles in Canada) that traverses from a point near Goldboro, Nova Scotia to the U.S.-Canada border and through the northeastern states of Maine and New Hampshire, with one terminus in Dracut, Massachusetts and another in Beverly, Massachusetts. *See* Spectra Energy, *Maritimes & Northeast Pipeline*, available at http://www.spectraenergy.com/Operations/Canadian-Natural-Gas-Pipelines/MaritimeNortheast-Pipeline/.

(ii) 8 mtpa of LNG (the equivalent of approximately 397.6 Bcf/y (or approximately 1.1 Bcf/d of natural gas) from Nova Scotia, Canada to: (a) any other nation that currently has or in the future develops the capacity to import LNG and with which the United States currently has, or in the future enters into, a free trade agreement ("FTA") requiring national treatment for trade in natural gas and LNG (the "LNG FTA Authorization");[5] and (b) any nation with which trade is not prohibited by U.S. law or policy, and that has, or in the future develops, the capacity to import LNG (the "LNG Non-FTA Authorization").

Bear Head LNG requests each of these authorizations for a 25-year period commencing on the earlier of the date of first export or 10 years from the date of issuance of the authorizations requested herein. Moreover, Bear Head LNG requests authorization to export natural gas and LNG on its own behalf and as agent for third parties, as detailed below.

Bear Head LNG is filing the instant application (the "Application") in connection with development of the proposed Bear Head LNG export terminal (the "Project" or "Bear Head Project") to be located in Nova Scotia, Canada. Once constructed, the Project will be capable of receiving, processing and liquefying North American natural gas, storing LNG, and loading LNG onto ocean-going vessels for delivery to foreign markets. Subject to the necessary export authorizations from the Canadian National Energy Board ("NEB")[6] and DOE/FE,[7] Bear Head LNG anticipates commencing LNG export operations from the Project in 2019.

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[5] In addition to Canada, the countries that currently have such FTAs with the United States are: Australia, Bahrain, Chile, Colombia, the Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, the Republic of Korea, and Singapore. *See* DOE/FE, *How to Obtain Authorization to Import and/or Export Natural Gas and LNG*, http://energy.gov/fe/services/natural-gas-regulation/how-obtain-authorization-import-andor-export-natural-gas-and-lng#LNG (last visited Feb. 22, 2015).

[6] The import and export of natural gas and LNG to and from Canada is subject to authorization from the NEB. *See* NEB Act, R.S.C. 1985, c. N-7 (Can.) (last amended 2012) [hereinafter *NEB Act*]. On November 6, 2014, Bear Head Corp. filed an application with NEB (the "NEB Application") seeking authorization to: (1) import 503 Bcf/y of natural gas to Canada from the United States via pipeline; and (2) export 12 mtpa of LNG, subject to a 15% tolerance, from Canada to international markets. *See* NEB, *Bear Head LNG Application for a License (A64168), available at* https://docs.neb-one.gc.ca/ll-eng/llisapi.dll?func=ll&objId=2545847&objAction=browse. The incremental four (4) mtpa of LNG proposed to be exported from the Project in the NEB Application will be produced using only Canadian natural gas as feedstock.

[7] In addition to the authorizations requested in this Application, Bear Head LNG filed an application with DOE/FE requesting authorization to access certain Canadian natural gas supplies that necessarily must flow

In recognition of DOE/FE's congressional mandate to protect the public interest and in deference to DOE/FE's authority to define its NGA Section 3 jurisdiction in the first instance, this Application includes a full public interest analysis in support of Bear Head LNG's request for LNG Non-FTA Authorization.[8] In this regard, Bear Head LNG is providing all information required by 10 C.F.R. §590.202 and relevant to the public interest factors DOE/FE has identified in prior decisions.[9] This information includes two reports prepared by Black & Veatch ("B&V") respectively analyzing the price impacts of LNG exports from the Project on the U.S. natural gas market as a whole,[10] and on the Northeast, with a particular emphasis on the New England market;[11] and one report prepared by Ziff Energy analyzing North American supply and demand dynamics through the year 2050, which Bear Head Corp. commissioned in support of the NEB Application.[12] Additionally, Bear Head LNG has included a report commissioned from The

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through the United States due to the configuration of existing North American pipeline infrastructure (the "Canadian NG Authorization"). *See Bear Head LNG Corp. and Bear Head LNG (USA) LLC, Application for Authorization to Import Natural Gas from, for Subsequent Export to, Canada*, FE Docket No. 15-14-NG (Jan. 23, 2015) [hereinafter *Canadian NG Application*]. The combined, total volume of natural gas to be exported under the Canadian NG Authorization and the NG Authorization requested herein will not exceed 503 Bcf/y, which is the total volume of natural gas requested for import in the NEB Application.

8 However, nothing in this Application is intended as a concession by Bear Head LNG that NGA Section 3 jurisdiction extends to LNG exports from Canada.

9 "These factors include economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others." *Cameron LNG, LLC, 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*, DOE/FE Order No. 3391-A, FE Docket No. 11-162-LNG, at 8 (Sept. 10, 2014) [hereinafter *Cameron LNG Order No. 3391-A*].

10 *See* Appendix B, Black & Veatch, *U.S. Market Impact Assessment for LNG Exports at the Bear Head Export Project* (February 2015) [hereinafter *U.S. Market Impact Report*].

11 *See* Appendix C, Black & Veatch, *New England Market Impact Assessment for LNG Exports at the Bear Head Export Project* (February 2015) [hereinafter *New England Market Impact Report*].

12 *See* Appendix D, Ziff Energy, *Long-Term Natural Gas Supply and Demand Forecast to 2050 for Bear Head LNG* (November 2014) [hereinafter *Ziff Report*].

Perryman Group that quantifies the economic and fiscal effects of the Project that would inure to the benefit of the U.S. economy.[13]

Given its location, the Project is not subject to review by the Federal Energy Regulatory Commission ("FERC"), which has served as the lead agency for National Environmental Policy Act ("NEPA")[14] compliance in the case of U.S. LNG export terminals in the Lower-48. But DOE/FE must nonetheless give appropriate consideration to the environmental effects of its decision in accordance with NEPA and DOE's implementing regulations,[15] prior to making a final decision on the Application. As discussed in Section IX below, Bear Head LNG's proposed natural gas and LNG exports do not involve the construction of any U.S. facilities giving rise to cognizable environmental effects under NEPA. Therefore, Bear Head LNG respectfully submits that DOE/FE may satisfy its NEPA requirements by determining that the proposed action is categorically excluded from the preparation of either an Environmental Assessment ("EA") or an Environmental Impact Statement ("EIS").

Nonetheless, to help inform DOE/FE's public interest consideration of environmental impacts related to its proposed exports, Bear Head LNG is submitting (i) a detailed summary of the Canadian regulatory framework applicable to the siting, construction and operation of the Project;[16] (ii) and an independent report prepared by SNC-Lavalin[17] analyzing the environmental

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[13] *See* Appendix E, The Perryman Group, *Economic and Fiscal Benefits of the Proposed Bear Head LNG Project in Nova Scotia: An Analysis with Emphasis on the Effects on the United States* (January 2015) [hereinafter *Perryman Report*]. As the Project will be located in Canada, the effects of its development on the Canadian economy also are quantified in the *Perryman Report.*

[14] 42 U.S.C. §§ 4321 *et seq.* (2012).

[15] *Id.*; 10 C.F.R. §§ 1021 *et seq.* (2014).

[16] *See* Appendix F, SNC-Lavalin, *Summary of Environmental Legislation, Permitting and Engineering Codes, Standards and Specifications* (February 2015) [hereinafter *Canadian Authorizations Overview*]. Appendix F also includes a listing of the Canadian Federal, provincial and local authorizations, permits and approvals required for the Project, the vast majority of which Bear Head Corp. already has obtained. SNC-Lavalin is a global engineering and construction group, employing over 4,500 individuals across more than 50 countries.

impacts associated with potential modification and expansion of the M&NP system, which Bear Head LNG contemplates will interconnect with the Project's proposed pipeline header near Goldboro, Nova Scotia for the delivery of natural gas feedstock to the Project.[18]

Bear Head LNG respectfully requests that DOE/FE issue an order granting the requested authorizations in accordance with the standard of review found in Section 3(c) of the NGA[19] by no later than April 30, 2015. However, if DOE/FE deems it necessary to conduct a full public interest analysis in accordance with the standard of review set forth in Section 3(a) of the NGA for the Non-FTA Authorization, then Bear Head LNG requests issuance of an order granting such authorization thereunder on an expedited basis by June 30, 2015; and an order granting the

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[17] *See* Appendix G, SNC-Lavalin *Anticipated Maritimes & Northeast Pipeline System Modification/Expansion Requirements* (February 2015) [hereinafter *M&NP Requirements Report*]. The *M&NP Requirements Report* considers potential modification and expansion of the M&NP facilities in the United States. While corresponding modification and expansion of the M&NP facilities in Canada would be required, DOE/FE has previously found impacts outside the U.S. territorial boundary are beyond the scope of DOE/FE review. *See infra* note 219. Bear Head LNG is submitting the *M&NP Requirements Report* under seal as privileged and confidential information. Public disclosure of the *M&NP Requirements Report* would negatively impact Bear Head LNG's competitive advantage and business interests by providing Bear Head LNG's competitors access to business confidential and proprietary material developed exclusively for Bear Head LNG's use, and at significant cost.

[18] M&NP's current operations involve moving gas from Canada to the United States (*i.e.*, north to south). Existing capacity on the U.S. portion of the M&NP system is 833,317 MMBtu/d, including at the existing cross-border facilities previously authorized by FERC to be used for the additional purpose of exporting gas to Canada. *See Maritimes & Northeast Pipeline, L.L.C.*, 128 FERC ¶ 61,070, at PP 1-3 (2009) [hereinafter *Maritimes Bidirectional Order*]. An operational reversal of the M&NP would be required in the first instance to enable gas supplies to flow on a firm basis from south to north (*i.e.*, from the Dracut, MA delivery point on the M&NP system to the Project pipeline header). As discussed in the *M&NP Requirements Report*, with minor modification of the existing facilities, incremental reverse transportation capacity would be available on the M&NP to transport significant gas volumes from Dracut, MA to the U.S.-Canada border. With the addition of compression and looping of the system, incremental reverse capacity would be available to accommodate the full volume of Bear Head LNG's proposed natural gas exports to the U.S.-Canada border.

[19] DOE/FE has stated that the non-FTA aspects of an "Application for Long-Term, Multi-Contract Authorization to Export Natural Gas into Canada for Consumption and Through Canada to Free Trade and Non-Free Trade Agreement Nations After Conversion into LNG," will be reviewed pursuant to NGA Section 3(a). *See* 79 Fed. Reg. 73,285 (Dec. 10, 2014). However, DOE/FE has not yet taken final agency action with respect to the authorizations requested in that application. As such, Bear Head LNG believes that the applicable NGA Section 3 legal standard for this Application remains an issue of first impression for DOE/FE.

NG Authorization and the LNG FTA Authorization consistent with Bear Head LNG's original request for authorizations under Section 3(c) of the NGA by April 30, 2015.[20]

In support of this Application, Bear Head LNG states as follows:

I.
DESCRIPTION OF THE APPLICANTS

The exact legal name of Bear Head Corp. is Bear Head LNG Corporation. Bear Head Corp. is a Canadian company incorporated pursuant to the laws of Nova Scotia. Bear Head Corp.'s principal place of business is 1001 McKinney St., Suite 400, Houston, TX 77002. Bear Head Corp. is a wholly-owned indirect subsidiary of Liquefied Natural Gas Limited ("LNGL").

The exact legal name of Bear Head (USA) is Bear Head LNG (USA), LLC. Bear Head (USA) is a limited liability company organized under the laws of the State of Delaware. Bear Head (USA)'s principal place of business is 1001 McKinney St., Suite 400, Houston, TX 77002. Bear Head (USA) is a wholly-owned indirect subsidiary of LNGL.

LNGL is a publicly listed Australian company based in Perth, Western Australia, that has the objective of developing LNG projects in Australia and overseas. LNGL's vision is to bring a dynamic concept of mid-scale LNG projects to the international energy market using its wholly-owned and developed Optimised Single Mixed Refrigerant ("OSMR®") process. In addition to the Bear Head Project, LNGL's current LNG project portfolio includes 100 percent ownership of

[20] Bear Head LNG has expended, and committed for future expenditure, substantial resources for the development of the Project on an expedited timeline due to the advancements in regulatory approvals, engineering and construction made to date. As discussed in Section V and in the *Canadian Authorizations Overview*, Bear Head Corp. currently holds eight of the ten initial Canadian regulatory approvals required for the construction of an LNG export terminal. The other two initial regulatory approvals are being modified to reflect the repurposing of the Project from an import to an export facility. One of these is the Permit to Construct, which is expected imminently from the Nova Scotia Utilities and Review Board ("UARB"), as evidenced by a recent letter from Lloyd's Register (which is UARB's Certifying Authority) to the UARB supporting such approval. The other is the Nova Scotia Environment Registration Document, which will be filed in short order for approval by no later than June 30, 2015. Issuance of the authorizations requested herein beyond June 30, 2015, will negatively affect Bear Head LNG's business interests by compromising its competitive advantage in having a fast-tracked permitting and construction schedule.

both the proposed Magnolia LNG Project to be located near the Port of Lake Charles in Louisiana, and the Fisherman's Landing LNG Project to be located near the Port of Gladstone in Queensland, Australia.

II.
COMMUNICATIONS AND CORRESPONDENCE

All communications and correspondence concerning this Application, including all service of pleadings and notice, should be directed to the following persons:[21]

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III.
EXECUTIVE SUMMARY

The Bear Head Project is proposed for the purpose of liquefying surplus North American natural gas for export as LNG to foreign markets. Bear Head LNG expects the first LNG exports from the Project to foreign markets to occur starting in 2019. Fast tracking of the Project has been made possible due to the significant regulatory approval, engineering and construction advancements by Bear Head Corp. The Project is proposed at the site Bear Head Corp. previously permitted as an import facility. Bear Head Corp. initiated construction at the site, but due to changed market conditions, construction was halted. Bear Head Corp. already holds eight of the ten initial Canadian regulatory approvals to construct the Project as an LNG export facility. All remaining regulatory approvals, including authorizations from NEB, are expected

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

by June 30, 2015. The integration of LNGL's proprietary front-end engineering design ("FEED") developed for its other LNG projects has allowed a compressed development schedule for the Project.

Abundant supplies of natural gas from the United States and Canada are available to serve both domestic natural gas needs and the needs of the Project through the proposed 25-year term.[22] The use of North American-sourced natural gas as feedstock for the Project would not significantly reduce the volume of natural gas potentially available for domestic consumption. This is supported by the U.S. Energy Information Administration's ("EIA") forecasts, as well as by the reports commissioned by Bear Head Corp., which illustrate that U.S. natural gas supply is ample, currently and in Bear Head LNG's proposed export timeframe. The robust natural gas supply, especially the well-documented increased production from unconventional resources, is forecasted to exceed demand. The *U.S. Market Impact Report* and the *New England Market Impact Report* both reflect a finding that LNG exports from the Bear Head Project as contemplated herein will not result in any significant impact on the price of natural gas for U.S. consumers over the analysis period of 2019 to 2049. In fact, the reports indicate that the minor impact on prices will decrease nationally and regionally over the life of the Project.

Moreover, the increasing interconnectivity of U.S. and Canadian natural gas supplies lends further support to the assertion that both domestic natural gas demand and demand created by the Project can be met without negative consequence to the availability of competitively-priced natural gas for U.S. consumption. Due to the interconnectivity of the North American natural gas pipeline grid, supply basins across the continent may be accessed to transport supply

[22] *See, e.g.*, *U.S. Market Impact Report*, *supra* note 10, at 8 (noting the Project has access to various U.S. supply basins via the interconnected North American pipeline network, as well as access to both Eastern Canadian and Western Canadian Sedimentary Basin supplies).

to demand points of liquidity. Specifically, the M&NP will provide the Project with access to diverse and competitively-priced North American natural gas supplies.[23]

The Project presents numerous benefits to the public, including increased U.S. economic activity, tax revenues and job creation during both the construction and operation phases of the Project. During the life of the Project, the estimated result in total economic gains is over $1.1 billion in gross product for the United States. Manufacturing of modules and cold boxes, integral portions of the equipment needed for the Project, will likely occur in Louisiana and will potentially increase the gross product in Louisiana by $0.4 billion.[24] There will be approximately 16,969 person-years of employment in the United States with Louisiana having approximately 4,445 person-years of employment.[25]

Significant economic benefits will continue throughout the life of the Project because Bear Head LNG may exclusively or partially (up to any authorized volumes) rely on U.S. natural gas feedstock for the Project, which would stimulate natural gas production across the nation. The cumulative economic benefits from enhanced production include an approximate increase in gross product of $93.8 billion and 988,553 person-years of employment over the life of the Project. On an average annual basis, an increase in gross product of approximately $3.75 billion and 39,542 person-years of employment is projected to occur over the Project's proposed term.[26]

On an international level, the Project will continue to advance the strong trading relationship between the United States and Canada. As both nations are among the largest foreign investors in each other, granting the long-term authorization as requested in this

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[23] *See Canadian NG Application*, *supra* note 7.

[24] *Perryman Report*, *supra* note 13, at 8.

[25] *Id.*

[26] *Id*. at 11-12.

Application will foster ongoing bi-lateral trade in natural gas commodities. And beyond the benefits of enhanced trade relations with our immediate neighboring ally, the export of LNG derived from U.S. natural gas has other geopolitical benefits domestically and abroad for other U.S. allies. Shifting from a net importer to a net exporter of natural gas by 2020,[27] the United States stands to gain increased energy independence and security resulting in greater diplomatic freedom and international influence, as well as an increased presence on the international stage as a global energy power player.[28]

Finally, there are no cognizable environmental impacts in the United States as the Bear Head Project does not require construction of any domestic facilities. Construction of the Project will occur in Canada and Bear Head LNG will rely upon existing natural gas pipelines to deliver U.S. natural gas feedstock for LNG production at the Project. And although Bear Head LNG acknowledges that modification and even expansion of the M&NP system is likely required to enable feedstock gas deliveries to the Project, the precise nature of those changes are unknown. Furthermore, while Bear Head LNG is aware that several major pipeline companies further upstream are actively contemplating or seeking FERC authorizations as necessary to expand their pipeline capacity to deliver gas to the Northeast, none of those plans are proposed in connection with the Bear Head Project.

For the foregoing reasons and as further described below, Bear Head LNG respectfully submits that the instant Application provides a complete record supporting a determination by

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[27] EIA, *Annual Energy Outlook 2014 with Projec*tions *to 2040*, at MT-22 (Apr. 2014), *available at* http://www.eia.gov/forecasts/aeo/mt_naturalgas.cfm [hereinafter *AEO 2014*].

[28] Robert Blackwill and Meghan L. O'Sullivan, *America's Energy Edge: The Geopolitical Consequences of the Shale Revolution*, Foreign Affairs, Council on Foreign Relations (March/April 2014) [hereinafter *America's Energy Edge*]. *See also* Kenneth B. Medlock III, *The Land of Opportunity? Policy, Constraints and Energy Security in North America*, James A. Baker III Institute for Public Policy, Rice University (June 2, 2014), *available at* http://bakerinstitute.org/research/land-opportunity-policy-constraints-and-energy-security-north-america/ [hereinafter *The Land of Opportunity*].

DOE/FE that Bear Head LNG's proposed exports are not inconsistent with the public interest. The record demonstrates availability of competitively-priced natural gas for consumers in the Northeast, and the nation as a whole. Furthermore, there are significant economic and international benefits to be gained, all without significant impacts on the environment.

IV.
AUTHORIZATION REQUESTED

Bear Head LNG respectfully requests DOE/FE grant long-term, multi-contract authorizations for Bear Head LNG to engage in exports of up to: (i) 440 Bcf/y (or approximately 1.2 Bcf/d) of natural gas by pipeline to Canada; and (ii) 8 mtpa of LNG (the equivalent of approximately 397.6 Bcf/y (or approximately 1.1 Bcf/d of natural gas)) from Nova Scotia, Canada to FTA and non-FTA nations.

Bear Head LNG requests each of these authorizations for a 25-year period commencing on the earlier of the date of first export or 10 years from the date of issuance of the authorizations requested herein. Moreover, Bear Head LNG requests authorization to export natural gas and LNG on its own behalf and as agent for third parties who would themselves hold title to the LNG at the time of export. Bear Head LNG will comply with all DOE/FE requirements for exporters and agents, including the registration requirements as first established in DOE/FE Order No. 2913[29] and most recently set forth in DOE/FE Order No. 3566.[30]

Bear Head LNG respectfully requests that DOE/FE issue an order granting the each authorization requested herein in accordance with the standard of review found in Section 3(c) of

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

[30] *Sabine Pass Liquefaction, LLC, Order Granting Long-term Multi-contract Authority to Export LNG by Vessel from the Sabine Pass LNG Terminal in Cameron Parish, Louisiana, to Free Trade Agreement Nations*, DOE/FE Order No. 3595, FE Docket No. 14-92-LNG (Feb. 12, 2015). The policy of registration was first developed in the context of LNG exports from the Lower-48; however, Bear Head LNG commits to complying with the same requirements for the export of LNG from the Project as contemplated in the instant Application.

the NGA by no later than April 30, 2015.[31] However, if DOE/FE deems it necessary to conduct a full public interest analysis for Non-FTA Authorization pursuant to Section 3(a) of the NGA, then Bear Head LNG requests issuance of an order granting such authorization on an expedited basis by June 30, 2015; and an order granting the NG Authorization and the LNG FTA Authorization consistent with Bear Head LNG's original request of authorizations by April 30, 2015.

V.
DESCRIPTION OF PROJECT

The Project is proposed for the purpose of exporting North American LNG to foreign markets.[32] The Project will be sited at the 255-acre site owned by Bear Head Corp. located within the Point Tupper/Bear Head Industrial Park, near the town of Port Hawksbury, on the Straight of Canso in Richmond County, Cape Breton, Nova Scotia. Major Project components include four (4) LNG trains with OSMR® technology, LNG ship berthing marine facilities, and two (2) LNG storage tanks, each with a volume of approximately 180,000 cubic meters ("m^3"). Each LNG train has a nominal LNG production capacity of two (2) mtpa, providing an initial total LNG production capacity of eight (8) mtpa.[33]

The Project is situated on Bear Head Corp.'s previously-permitted LNG import brownfield site. The Bear Head Project requires minor modification of certain existing initial permits and regulatory approvals (collectively, the "Project Approvals") issued by the relevant Canadian Federal, Nova Scotia Provincial and Richmond County administrative bodies, all of

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31 *See supra* note 19.

32 The Project was initially developed in 2001, as an LNG import facility by its then owner, Access Northeast Energy Inc. In 2004, a subsidiary of Anadarko Petroleum Corporation acquired the Project, and then on August 27, 2014, LNGL became the owner as a part of its acquisition of Bear Head Corp.

33 Bear Head Corp. anticipates expanding the Project through the addition of two (2) LNG trains to increase total LNG production capacity from eight (8) to 12 mtpa. However, Bear Head Corp. anticipates that gas supply to support such expansion would be derived strictly from Canadian sources. *See supra* note 6.

which remain valid today. Bear Head LNG currently holds eight Project Approvals that require no further modification, including confirmation from the Canadian Environmental Assessment Agency that no additional federal environmental analysis needs to be undertaken.[34] The Project is only awaiting two Project Approvals and the NEB authorizations.[35] No U.S. permits are required for the construction and operation of the Project.

Engineering and design work for the Project also is at advanced stages, including selection of LNGL's proprietary OSMR® liquefaction technology for the LNG trains. Bear Head Corp. is integrating the previously completed FEED developed for the import facility into the FEED developed by LNGL for its portfolio of LNG export facilities, including the Magnolia LNG project, which has served to fast-track the development of the Project as an LNG export facility.

Additionally, Bear Head LNG's Project development timeline is expedited due to construction work previously completed at the brownfield Project site. Specifically, the central portion of the site was blasted, cleared and re-graded; site and access roads were built; utilities were installed; and two foundations for 180,000 m^3 LNG tanks were poured, which Bear Head LNG expects to utilize.[36]

In light of advancements in regulatory approval, engineering and construction made to

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[34] The following Canadian Project Approvals require no modification: Transport Canada CEAA Screening (Federal Government), Navigable Waters Protection Act Authorizations (Federal Government), Fisheries and Oceans Canada CEAA Screening (Federal Government), Authorization for Works or Undertakings Affecting Fish Habitat (Federal Government), Environment Act Water Approval – Wetland Infill (Government of Nova Scotia), Breaking Soils of Highways Permit (Government of Nova Scotia), Development Permit (Municipality of Richmond County), and the Beaches Act Clearance (Government of Nova Scotia).

[35] The two outstanding Project Approvals are: the Permit to Construct, which is expected imminently from the UARB, as evidenced by a recent letter from Lloyd's Register to the UARB supporting such approval; and the Nova Scotia Environment Registration Document, which will be filed in short order for approval by no later than June 30, 2015. *See supra* note 6 for discussion of NEB Authorizations.

[36] Notably, environmental mitigation and restoration work was undertaken in connection with construction activities at the site. For example, culverts and erosion and sedimentation controls were put in place to manage surface water runoff from the site and associated access roads.

date (as summarized herein), Bear Head LNG is well positioned to meet its commercially-driven Project schedule and expects first LNG exports from the Project to foreign markets to occur in 2019.

VI.
COMMERCIAL STRUCTURE

Bear Head LNG anticipates a tolling commercial structure for the Project, in which customers of the Project ultimately will be responsible under the relevant liquefaction tolling agreements to procure natural gas supply, as well as natural gas pipeline transportation capacity for the delivery of such natural gas to the Project. As discussed in Section VII below, through its interconnection with the M&NP, the Bear Head Project will have access to diverse, and competitively-priced natural gas supplies from virtually every basin in North America.

Neither Bear Head Corp. nor Bear Head (USA) has entered into any long-term gas supply or long-term export contracts in connection with the export authorization requested herein. Once executed, Bear Head LNG will file any such contracts with DOE/FE in accordance with DOE/FE's filing requirements.[37]

VII.
EXPORT SOURCES

Abundant supplies of natural gas from basins in the United States and Canada are available to serve domestic natural gas needs and the proposed Bear Head Project.[38] Productive potential for natural gas in both the United States and Canada is projected to exceed supply in the foreseeable future.[39] Natural gas can be sourced from basins throughout North America, including Eastern and Western Canada, and the Appalachian, Gulf of Mexico, and Rocky

[37] Notably, 10 C.F.R. § 590.202(b) only requires the inclusion of such materials "to the extent practicable."

[38] Collectively, North America has 3,044 trillion cubic feet ("Tcf") of remaining resource. See *Ziff Report*, *supra* note 12, at 7.

[39] *Id.* at 2.

Mountain regions of the United States, providing the Project with tremendous supply diversity and optionality.[40] North America's sophisticated network of gas transportation and storage facilities permits gas to be transferred inter-regionally to meet both base load and peak seasonal variables.[41] The basins provide gas to a series of interconnecting pipeline systems, and as a result, Bear Head LNG will be able to source gas from almost any point on the North American natural gas pipeline grid through direct physical delivery or by displacement.[42]

The Appalachian basin, which encompasses both the Marcellus and Utica supply regions, represents one of the most extensive potential sources of natural gas supply available in the United States. Only 5% of the Appalachian basin has been produced.[43] The Appalachian basin is estimated to have 757 Tcf of remaining resource, which is greater than the recoverable resource in Canada, and the highest recoverable resource of any region in the United States.[44] Production in the region is rapidly increasing such that Appalachian productivity is driving shifts in directional flow and construction plans throughout the established pipeline infrastructure.[45] Appalachian gas production is well situated to provide a large portion of the gas requirements of eastern Canada through 2050, including gas needed for LNG export volumes.[46]

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40 *U.S. Market Impact Report, supra* note 10, at 8.

41 *Ziff Report, supra* note 10, at 42.

42 *U.S. Market Impact Report, supra* note 10, at 8. *See also* Ziff Report, *supra* note 12, at 44 (discussing the North American's market ability to access natural gas from multiple sources and that "North American and Canadian consumers have the choice to purchase the lowest cost delivered gas, and producers can choose to transport gas to the highest paying markets on a netback basis.").

43 *U.S. Market Impact Report, supra* note 10, at 8; *Ziff Report, supra* note 12, at 10.

44 *Ziff Report, supra* note 12, at 10.

45 *AEO 2014, supra* note 27, at MT-25.

46 *Ziff Report, supra* note 12, at 29; *see, e.g., AEO 2014, supra* note 27, at MT-25, "Marcellus natural gas exceeds 100% of the demand projected for the New England and Mid-Atlantic Census Divisions from 2016 through 2040 in the Reference case, requiring transportation of some Marcellus gas to other markets."

In addition, U.S. supply from both the Rockies and Gulf regions are potential sources of natural gas feedstock for the Project. The Rockies have 396 Tcf of remaining resources, and recent pipeline activity and market trends have improved Northeast access to the supply basin.[47] The Gulf region resources have 572 Tcf remaining,[48] which provides yet another resource available to the Northeast and the Project through the expansive North American pipeline grid.[49]

VIII.
PUBLIC INTEREST

A. Analysis of Domestic Need for the Gas to Be Exported

As noted, under DOE precedent, "domestic need for the natural gas proposed to be exported [is] the only explicit criterion that must be considered in determining the public interest."[50] This is consistent with DOE's 1984 *Policy Guidelines*, which state that "[t]he market, not government, should determine the price and other contract terms of imported [and exported] gas," and that "the federal government's primary responsibility … should be to evaluate the need for the gas . . ."[51] Given the increases in recoverable resources in the United States—especially the well-documented increase in production associated with emerging

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47 *Ziff Report, supra* note 12, at 7-8.

48 *Id*. at 7.

49 Significant quantities of Canadian gas are available to the Bear Head Project from Canadian supply basins such as the Western Canadian Sedimentary Basin, and Ontario and Quebec in Central Canada. *See U.S. Market Impact Report, supra* note 10, at 8-12. To this end, Bear Head LNG filed the Canadian NG Application to facilitate transportation of Canadian supply to the Project. *See supra* note 7.

50 *Phillips Alaska Nat. Gas Corp. and Marathon Oil Co., Order Extending Authorization to Export Liquefied Natural Gas from Alaska*, DOE/FE Order No. 1473, FE Docket No. 96-99-LNG, at 14 (Apr. 2, 1999) [hereinafter *Phillips Alaska*]; "In prior decisions, however, DOE/FE has identified a range of factors that it evaluates when reviewing an application for export authorization. These factors include economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others." *Freeport LNG Expansion, L.P., et al., Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations*, DOE-FE Order No. 3282-C, FE Docket No. 10-161-LNG, at 9 (Nov. 14, 2014).

51 DOE, *New Policy Guidelines and Delegation Orders from Secretary of Energy to Economic Regulatory Administration and Federal Energy Regulatory Commission Relating to the Regulation of Imported Natural Gas*, 49 Fed. Reg. 6684, 6685 (Feb. 22, 1984). While the *Policy Guidelines* addressed natural gas imports, DOE/FE has recognized that their "principles are applicable to exports as well." *Phillips Alaska*, *supra* note 50, at 14.

unconventional resources—the national and regional supply/demand balance, as well as the limited price impacts to consumers, show that exports of LNG from the Project would yield net economic benefits to the United States and would be consistent with the public interest because there is a lack of need for domestically produced natural gas.

1. U.S. Natural Gas Supply

Currently, "natural gas provides 27% of the marketable energy consumed in the United States."[52] Since 2005, U.S. marketed natural gas production has grown 35.7%, to 25.7 Tcf in 2013, representing the highest production levels in U.S. history.[53] Production of domestic natural gas has expanded rapidly in recent years with the application of new technologies increasing the production of large unconventional resource base permeating the United States.[54] Shale gas production accounted for 40% of the Lower-48 natural gas production in 2013, in contrast to about 5% in 2006.[55] Actual U.S. natural gas production increased from approximately 6 Bcf/d in January 2008 to 40 Bcf/day in 2014, representing an increase of more than five times during this period.[56]

The future outlook for U.S. natural gas supply is likewise robust. Gas production from the Marcellus shale play in the Northeast and from the Haynesville shale play in the South remain steady and accessible to the Project.[57] According to Ziff Energy, the Appalachian region

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[52] The Brattle Group, *Understanding Natural Gas Markets*, at 4 (September 2014) (prepared for the American Petroleum Institute), *available at* http://www.api.org/~/media/files/oil-and-natural-gas/natural-gas-primer/understanding-natural-gas-markets-primer-high.pdf [hereinafter *Brattle Report*].

[53] *See* EIA, *U.S. Natural Gas Marketed Production*, http://www.eia.gov/dnav/ng/hist/n9050us2A.htm (last visited Feb. 22, 2014). *See also U.S. Market Impact Report, supra* note 10, at 7.

[54] *See generally* EIA, *Today in Energy: Growth in U.S. Hydrocarbon Production from Shale Resources Driven by Drilling Efficiency* (Mar. 11, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=15351 (last visited Feb. 22, 2014).

[55] *Brattle Report*, *supra* note 52, at 2.

[56] *U.S. Market Impact Report*, *supra* note 10, at 18.

[57] *U.S. Market Impact Report*, *supra* note 10, at 18.

has only produced 5% (37 Tcf) of its ultimate potential, with 757 Tcf remaining.[58] The Gulf Region has the largest amount of ultimate potential of 1,142 Tcf with 572 Tcf remaining resources.[59] Additionally, the Rockies region has produced only one third of its ultimate potential, with 396 Tcf remaining resources.[60]

The EIA's *Annual Energy Outlook 2014* Reference Case projects a 56% increase in total natural gas production between 2012 and 2040, with shale gas production accounting for 53% of total production by 2040.[61] As a result of horizontal drilling and hydraulic fracturing, the total amount of natural gas production continues to increase despite a reduction of rigs.[62] The supply of dry gas remains steady and volumetrically more significant than production of associated gas from wet plays, largely due to the Marcellus and Haynesville shale plays.[63] Total U.S. dry gas production is projected to be 37.54 Tcf by 2040 in the Reference Case, with a 1.6% annual growth rate between 2012 and 2040.[64] Such ample supply of natural gas is causing imports to decline and allows the United States to transition from a net importer to a net exporter later this decade.[65] The EIA projects that the United States will be a net exporter of 5.8 Tcf in 2040.[66]

2. U.S. Natural Gas Demand

Domestic natural gas supply will continue to outpace domestic demand during the proposed 25-year term of this Application. Although demand for natural gas has increased since

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58 *See Ziff Report*, *supra* note 12, at 7.

59 *See Ziff Report*, *supra* note 12, at 7 fig. 3.

60 *See Ziff Report*, *supra* note 12, at 7 fig. 3.

61 *AEO 2014*, *supra* note 27, at MT-23.

62 *Brattle Report*, *supra* note 52, at 8, 10 fig.9; *see also* EIA, *Drilling Productivity Report for Key Tight Oil and Shale Gas Regions* (Feb. 9, 2015), *available at* http://www.eia.gov/petroleum/drilling/pdf/dpr-full.pdf.

63 *U.S. Market Impact Report*, *supra* note 10, at 18.

64 *AEO 2014*, *supra* note 27, at A-27.

65 *Brattle Report*, *supra* note 52, at 10.

66 *AEO 2014*, *supra* note 27, at MT-22.

2009, production of natural gas has increased faster due to the shale gas revolution.[67] As increased production outpaces increasing demand (coupled with a decline in natural gas imports), the United States is forecasted to become a net exporter before 2020.[68] During the period from 2012 to 2040, the *AEO 2014* Reference Case predicts long-term annual gas demand growth of only 0.8%, increasing from 25.64 Tcf to 31.63 Tcf.[69] In contrast, total U.S. dry gas production during the same period is projected to double, with a 1.6% annual growth rate.[70]

Moreover, the average energy use per person from 2012 to 2040 is forecasted to decline as the "U.S. economy [is] changing in ways that can lower energy use" despite a population increase of 0.7% per year from 2012 to 2040.[71] Energy use per capita declines to 279 million Btu per person in 2040 (a level not seen since 1965) according to the *AEO 2014* Reference Case, down from 302 million Btu in 2012.[72] Such projected decline is due to a combination of factors, including more efficient appliances and vehicles.[73]

The industrial sector is forecasted to have moderate growth over the long term while residential and commercial demand is expected to remain flat as population and economic growth are offset by energy efficiency gains.[74] The 0.8% annual increase in natural gas consumption is primarily due to its use in electricity generation and in the industrial sector.[75]

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67 *Brattle Report*, *supra* note 52, at 3.

68 *AEO 2014*, *supra* note 27, at MT-22.

69 *Id.* at A-27; *see also U.S. Market Impact Report*, *supra* note 10, at 22 (B&V anticipates the demand for natural gas in the Lower-48 to have an average growth rate of 0.9% per year over a 2014 – 2049 forecasted period).

70 *AEO 2014*, *supra* note 27, at A-27.

71 *Id.* at MT-5.

72 *Id.*

73 *Id*.

74 *U.S. Market Impact Report*, *supra* note 10, at 22.

75 *AEO 2014*, *supra* note 27, at MT-6.

a. *Industrial Sector*

The industrial sector has the largest increase in total primary consumption as a result of low natural gas prices from steady increased domestic natural gas production through 2040.[76] Energy consumption in the industrial sector increases an average of 0.7% per year to 8.68 Tcf in 2040 from 7.14 Tcf in 2012 in the *AEO 2014* Reference Case.[77]

b. *Electricity Sector*

The U.S. electric power sector consumption of natural gas also increases by an average of 0.7% per year in the *AEO 2014* Reference Case, increasing from 9.25 Tcf in 2012 to 11.23 Tcf in 2040.[78] The steady growth of natural gas-fired generation in the electricity sector is occurring mostly in regions decreasing coal-fired capacity, which is primarily driven by new environmental regulations leading to the retirement of coal-fired generation.[79]

c. *Commercial Sector*

The commercial sector is the next largest end-use sector of total primary energy use. Natural gas use will increase approximately 0.7% per year.[80] *AEO 2014*'s Reference Case forecasts natural gas consumption to be 3.57 Tcf in 2040 as opposed to 2.90 Tcf in 2012.[81]

d. *Residential Sector*

The residential sector is forecasted to have a modest decline in natural gas consumption to 4.12 Tcf in 2040 from 4.17 Tcf in 2012 due to efficiency gains.[82] The residential sector's

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76 *Id.* at MT-5, MT-11.

77 *Id.* at A-27.

78 *Id.*

79 *Id.* at MT-6 and MT-16; *see also U.S. Market Impact Report*, *supra* note 10, at 4 and 22 (noting "[i]n June 2014, the [EPA] proposed the Clean Power Plan, with the overall objective to achieve a cumulative nationwide reduction of [greenhouse gas] emissions of 30 percent below 2005 emission levels by 2030", which leads to more power plants using natural gas generation as opposed to coal-fired generation).

80 *AEO 2014*, *supra* note 27 at A-27.

81 *Id.*

overall natural gas use is 1% lower in 2040 than in 2012.[83] Natural gas use declines in every end-use service except space heating, and continues to account for a significant portion of water heating and cooking.[84]

e. *Transportation Sector*

Natural gas use for transportation fuel increases but does not make up a large share of total use.[85] The *AEO 2014* Reference Case forecasts consumption related to transportation will grow 11.3% per year increasing to 0.85 Tcf in 2040 from 0.04% in 2012.[86] The use of natural gas by heavy-duty vehicles, trains and ships are the vast majority of growth in natural gas consumption in this sector.[87]

3. U.S. Price Impacts

Analyses performed and commissioned by DOE, show that LNG exports from the United States would not result in adverse economic impacts to U.S. consumers. Specifically, DOE/FE has commissioned three studies to evaluate the effects of LNG exports on the U.S. economy, and has explained that the studies it has commissioned show "that exports will benefit the economy as a whole."[88] In January 2012, the EIA issued a study on the effects of four levels of U.S. LNG exports—between 6 Bcf/d and 12 Bcf/d, at low and high rates of export growth—on domestic

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82 *Id.*

83 *Id.* at MT-7.

84 *Id.*

85 *Id.* at MT-21.

86 *Id.* at A-27.

87 *Id.* at MT-15, MT-21.

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

energy markets.[89] (Notably, the *2012 EIA Export Study* did not consider macroeconomic effects;[90] and its scenarios were all provided in the context of the EIA's *Annual Energy Outlook 2011*,[91] whose Reference Case projected dry gas production levels of 26.32 Tcf by 2035,[92] compared with a projected 2035 production level of 36.09 Tcf (37% higher) in the *AEO 2014* Reference Case.[93]) The EIA has projected that natural gas prices would rise over time even in the *2012 EIA Export Study's* baseline case which included no additional LNG exports.[94] Increased LNG exports were projected to lead to increased natural gas wellhead prices under the Reference Case supply forecast, with all four scenarios leading to price increases followed by declines.[95] Assuming lower supply, initial price increases were projected to be more significant.[96]

The DOE commissioned the December 2012 NERA Economic Consulting report to assess the macroeconomic impacts (including on domestic natural gas prices) of various levels of LNG exports (ranging from 370 Bcf to 4,380 Bcf).[97] "In all of the scenarios analyzed," the *NERA Report* found that the United States "would experience net economic benefits from increased LNG exports."[98] With regard to the effect of natural gas prices, the *NERA Report*

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89 EIA, *Effect of Increased Natural Gas Exports on Domestic Energy Markets, as Requested by the Office of Fossil Energy* (Jan. 2012) [hereinafter *2012 EIA Export Study*], *available at* http://energy.gov/sites/prod/files/2013/04/f0/fe_eia_lng.pdf.

90 *Id.* at 3.

91 *Id.* at 1.

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

93 *AEO 2014*, *supra* note 27, at A-27.

94 *2012 EIA Export Study*, *supra* note 89, at 7.

95 *2012 EIA Export Study*, *supra* note 89, at 8.

96 *Id.* at 9.

97 NERA Economic Consulting, *Macroeconomic Impacts of LNG Exports from the United States* at 1, 10 (Dec. 3, 2012) [hereinafter *NERA Report*], *available at* http://energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf.

98 *Id*. at 6.

projected that "price changes attributable to LNG exports remain in a relatively narrow range across the entire range of scenarios."[99]

It also explained that "[t]he market limits how high U.S. natural gas prices can rise under pressure of LNG exports, because importers will not purchase U.S. exports if the U.S. wellhead price rises above the cost of competing supplies."[100] (The *2012 EIA Export Study*, in contrast, "was limited to the relationship between export levels and domestic prices without, for example, considering whether or not those quantities of exports could be sold at high enough world prices to support the calculated domestic prices."[101] Accordingly, the price increases estimated by the NERA Report were generally lower than those estimated in the *2012 EIA Export Study*,[102] and the *NERA Report* estimated that the peak natural gas export levels—and resulting price increases—analyzed in the *2012 EIA Export Study* are "not likely."[103])

Regardless, the *NERA Report* found net benefits to U.S. consumers even in the export scenarios that led to the most significant theoretical price increases projected by the EIA:

> Across the scenarios, U.S. economic welfare consistently increases as the volume of natural gas exports increased. This includes scenarios in which there are unlimited exports. The reason for this is that even though domestic natural gas prices are pulled up by LNG exports, the value of those exports also rises so that there is a net gain for the U.S. economy measured by a broad metric of economic welfare or by more common measures such as real household income or real GDP. Although there are costs to consumers of higher energy prices and lower

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99 *Id*. at 2.

100 *Id*. at 6.

101 *Id*. at 3.

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

103 *Id.* at 9.

> consumption and producers incur higher costs to supply the additional natural gas for export, these costs are more than offset by increases in export revenues along with a wealth transfer from overseas received in the form of payments for liquefaction services. The net result is an increase in U.S. households' real income and welfare.[104]

The NERA Report noted that these projected net economic benefits are "exactly the outcome that economic theory describes when barriers to trade are removed."[105]

Most recently, EIA produced a second study commissioned by DOE that evaluated the effects on U.S. energy markets of increased LNG exports (ranging from 12 Bcf/d to 20 Bcf/d) from the contiguous United States in light of the *AEO 2014*.[106] The *2014 Increased Export Study* projected that, under the *AEO 2014* Reference Case, the increased LNG export levels analyzed would lead to a 2% to 5% increase in residential natural gas prices between 2015 and 2040 compared to baseline projections.[107] This is less than the 3%–7% average increase in residential natural gas expenditures between 2015 and 2035 compared to baseline projections that EIA had previously projected for a lower level of exports under the *Annual Energy Outlook 2011* Reference Case.[108] Furthermore, echoing the *NERA Report*, the *2014 Increased Export Study* found that increased LNG exports "result in higher levels of economic output," and that investment resulting from increased natural gas production "more than offsets the adverse impact of somewhat higher energy prices when the export scenarios are applied."[109]

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

[105] *Id.* at 1.

[106] U.S. Energy Information Administration, *Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets* (Oct. 29, 2014) [hereinafter *2014 Increased Export Study*], *available at* http://www.eia.gov/analysis/requests/fe/.

[107] *Id.* at 12.

[108] *2012 EIA Export Study*, *supra* note 89, at 15.

[109] *2014 Increased Export Study*, *supra* note 106, at 12.

To supplement publically available information and forecasts, Bear Head Corp. commissioned the *U.S. Market Impact Report* to specifically analyze the market pricing impact of the Bear Head Project on U.S. markets. The *U.S. Market Impact Report* used prices at Henry Hub as a barometer for the national price impact.[110] The *U.S. Market Impact Report* found that the export volumes proposed in the Application have a limited impact on natural gas prices across the United States.[111]

To conduct its analysis, B&V considered market pricing impacts throughout the Lower-48 under four scenarios from 2019 to 2049. The first scenario, the *Base Case*, considers demand associated with LNG exports from terminals in the United States and Canada reaching 9.3 Bcf/d by 2020 and 11.3 Bcf/d by 2025.[112] The Base Case was developed from B&V's 2015 Energy Market Perspective, which incorporates B&V's assessment of the U.S. Environmental Protection Agency's ("EPA") proposed Clean Power Plan,[113] and natural gas liquid uplifts to shale production costs and their impact of North American unconventional production.

The second scenario, the *With Bear Head Project Exports Case* ("Bear Head Exports Case"), replicates the Base Case, but factors into the model an additional 1.2 Bcf/d of natural gas demand associated with LNG exports from the Bear Head Project beginning in 2019.[114]

The third scenario, the *High LNG Exports Case* ("High LNG Exports Case"), adds an additional 3.0 Bcf/d of natural gas demand associated with LNG exports to the Base Case to

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110 *U.S. Market Impact Report*, *supra* note 10, at 3.

111 *Id.* at 7.

112 *Id.* at 3.

113 79 Fed. Reg. 34,830 (June 18, 2014). *See also* EPA, *Carbon Pollution Standards – Clean Power Plan Proposed Rule*, http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule (last visited Feb. 23, 2015).

114 *U.S. Market Impact Report*, *supra* note 10, at 3.

stress test the results of the Base Case, and to account for exports from additional LNG export terminals that are likely to be permitted in the near future.

The fourth and final scenario, the *High LNG Exports with Bear Head Project Exports Case* ("High Exports with Bear Head Case"), adds an additional 1.2 Bcf/d of natural gas demand associated with LNG exports from the Bear Head Project to the High LNG Exports Case to account for the Bear Head Project's exports, as well as exports from additional LNG export terminals that may be permitted in the near future.

The report shows the estimated domestic price impact from the Bear Head Project to be minimal, and that impacts are projected to decrease over the life of the Project. In fact, the report found that domestic prices would decrease over the proposed Project term. Specifically, under the Bear Head Exports Case, the Henry Hub price ($5.61/MMBtu) only represents a 0.8% increase over the Base Case ($5.57/MMBtu) for the first 15 years of the analysis. For the remaining part of the period, a minimal price increase at Henry Hub associated with the Bear Head Exports Case occurs with a mere 0.1% increase over the Base Case. Similarly, under the High Exports with Bear Head Case, the Henry Hub price ($5.75/MMBtu) was estimated to be only $0.05 higher than the High LNG Exports Case for the first 15 year period (an approximate 0.9% increase).[115] During the remaining 16 years, the anticipated Henry Hub price for the High Exports with Bear Head Case ($8.61/MMBtu) only reflects a 0.2% increase over the High LNG Exports Case ($8.60/MMBtu).[116]

4. Regional Supply

Production from the Marcellus region, which accounts for almost 40% of U.S. shale gas production, has increased dramatically over the past four years, from 2 Bcf/d in 2010 to over 15

[115] *Id*. at 5.

[116] *Id.*

Bcf/d through July 2014.[117] As previously mentioned, the Appalachian region has produced only 5% (37 Tcf) of its ultimate potential, with 757 Tcf remaining.[118] The *AEO 2014* Reference Case projects that natural gas production from the Marcellus shale will grow from 1.9 Tcf in 2012 to a peak production volume of about 5 Tcf per year between 2022 and 2025.[119]

The New England natural gas market lacks local gas production, which has historically necessitated an influx of natural gas from supply basins throughout the United States and Canada.[120] Five of the major interstate pipelines (Algonquin Gas Transmission ("Algonquin"), the Iroquois Pipeline, the Portland Natural Gas Transmission System, the M&NP and the Tennessee Gas Pipeline ("Tennessee")) and two import terminals (Everett LNG and Canaport LNG) currently supply New England and the Northeast.[121] However, recent market shifts due to the overabundance of supply in the Appalachian region have decreased the Northeast's need to import LNG from the Everett LNG and Canaport LNG terminals. Now, the Northeast is sourcing increasing quantities from the Marcellus and Utica shale gas production areas.

5. Regional Demand

In the *AEO 2014* Reference Case, natural gas supply from the Marcellus region is projected to exceed 100% of the demand projected for the New England and Mid-Atlantic Census Divisions from 2016 through 2040, including by more than 1.0 Tcf during the peak production period of 2022 through 2025.[122] The overabundance of natural gas resources in the Marcellus shale formation for the region will require some of the Marcellus gas to be transported

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[117] EIA, *Today in Energy: Marcellus Region Production Continues Growth* (Aug. 5, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=17411 (last visited Feb. 22, 2014).

[118] *See Ziff Report*, *supra* note 12, at 7.

[119] *AEO 2014*, *supra* note 27, at MT-25.

[120] *New England Market Impact Report*, *supra* note 11, at 8.

[121] *Id*.

[122] *AEO 2014*, *supra* note 27, at MT-25.

to other markets.[123] The EIA noted that "Marcellus shale gas production could provide up to 39% of the natural gas needed to meet demand in markets east of the Mississippi River during that period—up from 16% in 2012," and "at least 31% of the region's total demand for natural gas through 2040."[124] It also recently observed that "[p]roduction in the Marcellus Region surpassed winter demand for natural gas in Pennsylvania and West Virginia several years ago and is now on track to be enough to equal the demand in those states plus New York, New Jersey, Delaware, Maryland, and Virginia combined."[125] Since the summer of 2012, rising growth in Marcellus natural gas production "has outpaced growth in the region's available pipeline takeaway capacity."[126] The EIA has explained that resulting price effects could mean "some drilling activity may move away from the Marcellus back to Gulf Coast plays such as the Haynesville and Barnett."[127]

Over the last 15 years, the New England natural gas market has seen steady demand growth from the power generation sector.[128] Price spikes, last winter in particular, have occurred due to seasonal peaking demand, leading to basis blowouts. Between 2013 and 2014, winter price spikes lead to increases in electric rates for 2015 of 23% to 37%. However, as discussed below, significant pipeline infrastructure development is projected and new capacity is already proposed, which may help ameliorate such issues in the near future.

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123 *Id.*

124 *Id.*

125 *See supra* note 117.

126 EIA, *Today in Energy: Some Appalachian Natural Gas Spot Prices Are Well Below the Henry Hub National Benchmark* (Oct. 15, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=18391 (last visited Feb. 22, 2015).

127 EIA, *Short-Term Energy Outlook*, at 6 (May 2014), *available at* http://www.eia.gov/forecasts/steo/archives/May14.pdf.

128 *See New England Market Impact Report*, *supra* note 11, at 9.

Compared to the nation as a whole, New England is projected to experience demand growth across all sectors, with moderate growth in the residential and commercial sectors.

a. *Industrial Sector*

Industrial demand in New England is projected to grow at 0.70% per year over the life of the Project.[129] The *U.S. Market Impact Report* credits this rise to increased oil to gas conversions.[130]

b. *Electricity Sector*

Electricity demand in New England is projected to grow at 0.82% per year over the life of the Project.[131] The *U.S. Market Impact Report* credits this rise to the Clean Power Plan proposed by the EPA in June 2014 which seeks to decrease nationwide greenhouse gas emissions by 30%, which will lead to more power plants using natural gas generation .[132]

c. *Commercial Sector*

Commercial demand in New England is projected to grow at a rate of 1.1% per year over the life of the Project.[133] Such growth is attributable in part to state conversion plans, such as Connecticut's Comprehensive Energy Strategy.[134]

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[129] *U.S. Market Impact Report*, *supra* note 10, at 23.

[130] *Id.*

[131] *Id.*

[132] *Id.* at 22;

[133] *Id.* at 23.

[134] *Id.* at 22. *See also* B&V, *Natural Gas Infrastructure and Electric Generation: Proposed Solutions for New England*, at 24 (Aug. 26, 2013) (a report prepared for the New England State Committee on Electricity ("NESCOE")). Connecticut's Comprehensive Energy Strategy "lays out a coordinated approach to address [Connecticut's] collective energy, economic and environmental challenges." The plan makes a series of policy recommendations, and highlights natural gas as a priority area for the state. *2013 Connecticut Comprehensive Energy Strategy, Executive Summary* (Feb. 19, 2013), *available at* http://www.ct.gov/deep/lib/deep/energy/cep/2013_ces_executive_summary_final.pdf.

d. *Residential Sector*

Residential demand in New England is projected to grow at a rate of 0.79% per year over the life of the Project.[135] Similar, to the commercial sector, the residential sector demand growth is due in part to state conversion plans.

6. Regional Price Impacts

B&V's *New England Market Impact Report* analyzed the pricing impacts for the same four scenarios considered in the *U.S. Market Impact Report*.[136] The study examined prices at two New England market price points and several upstream northeastern market price points[137] under each scenario to gauge impacts of increased LNG Exports in the United States and Canada from 2019 to 2049. B&V concluded the proposed export volumes proposed by the Bear Head Project are expected to have a limited price impact in New England and an even lesser impact on upstream northeastern price points during the 2019-2049 period.[138]

The *New England Market Impact Report* found that impacts to the Algonquin price point decreased over the life of the Project, and were minimal under all scenarios. For Algonquin, city-gates, the average price for the first 15 years under the Bear Head Exports Case ($5.79/MMBtu) only reflected a 1.8% increase over the Base Case ($5.69/MMBtu).[139] For the remaining 16 years, impact was even less (a 1% increase) over the Base Case ($8.68/MMBtu).[140] Similarly, the first 15 years of the High Exports with Bear Head Case ($5.96) only reflected a 2.2%

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135 *U.S. Market Impact Report*, *supra* note 10, at 23.

136 The four scenarios assessed are the *Base Case*, the *Bear Head Exports Case*, the *High LNG Exports Case*, and the *High Exports with Bear Head Case*. *See supra* section VIII.A.3 of the Application.

137 The *New England Market Impact Report* considered price impacts at Algonquin, city-gates, and Tennessee Zone 6 Delivered in New England, and considered upstream impacts at Dominion, South Point, Tennessee Zone 4, Transco Zone 6 NY, Transco Zone 6, Non-NY, and Tetco M-3. *New England Market Impact Report*, *supra* note 11, at 4-5.

138 *Id.* at 6.

139 *Id.* at 4.

140 *Id.*

increase over the High LNG Exports Case ($5.84/MMBtu) and the remaining 16 years of the High Exports with Bear Head Case ($8.88) only reflected a 1.1% increase over the High LNG Exports Case ($8.78/MMBtu).[141]

Analysis of the Tennessee Zn. 6 price point showed comparable impact trends to those identified in the modelling for Algonquin, city-gates, with price impacts decreasing over the analysis period. For Tennessee Zn. 6, the Bear Head Exports Case reflected a 1.7% increase over the Base Case for the first 15 years, and a 0.8% increase over the Base Case for the remaining 16 years.[142] Under the High Exports with Bear Head Case, a 1.9% increase over the High LNG Exports Case is anticipated over the first 15 years for Tennessee Zn. 6, and a 0.9% increase over the High LNG Exports Case is anticipated during the remaining 16 years.[143]

Price differentials for upstream price points in the Northeast are anticipated to be even smaller than in New England. For the five northeast price points analyzed, the Bear Head Exports Case reflected an increase between 0.7% and 1.1% over the Base Case over the first 15 year period, and an increase between 0.2% and 0.4% for the remaining 16 years.[144] Analysis under the High Exports with Bear Head Case for the five northeast price points shows an increase between 0.8% and 1.3% over the High LNG Exports Case over the first 15 year period, and an increase between 0.3% and 0.6% for the remaining 16 years.[145]

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141 *Id.*

142 *Id.* at 5.

143 *Id.*

144 *Id.* at 17-18.

145 *Id.*

7. Supply/Demand Balance Demonstrates the Lack of U.S./Regional Need

This Application is consistent with the public interest because the natural gas resources in the United States are prolific and are projected to outpace consumer energy demands at fair market prices during the proposed 25-year term of the authorizations requested herein.

First, the U.S. "[n]atural gas markets…balance in response to increased LNG exports mainly through increased natural gas production."[146] Increased production is feasible due to the magnitude of domestic natural gas resources and the ability of producers to apply new technologies to tap unconventional shale gas resources. Producers can quickly respond to increases in demand by applying such advanced technologies to access more shale-gas and thereby preventing an occurrence of limited supply. Further, the sophisticated and interconnected U.S. pipeline infrastructure allows demand to be easily met as the pipelines "are expected to continue to adapt, connecting gas from growing supply regions to major demand centers."[147]

Second, the Northeast has access to one of the most extensive potential sources of natural gas supply available in the United States – the Appalachian region, which consists of both the Marcellus and Utica shale plays. The EIA even notes that the overabundance of supply in the Appalachian region requires some Marcellus gas to be transported out of the region to other markets because supply exceeds 100% of the demand projected in the region between 2012 and 2040 in the Reference Case.[148] As a result, the Northeast becomes less dependent on natural gas from Canada and the Gulf Coast due to the growing shale gas supply in the Appalachian region and its proximity to major east coast consuming markets.[149]

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146 *2014 Increased Export Study*, *supra* note 106.

147 *Ziff Report*, *supra* note 12, at 47-48.

148 *AEO 2014*, *supra* note 27, at MT-25

149 *Brattle Report*, *supra* note 52, at 6.

Moreover, the market dynamics of the existing pipeline infrastructure in the Northeast are rapidly changing. This shift is due in large part to price spikes and increased demand in New England, a declining need to import supply from Eastern Canada to New England, and increased production in and access to gas from unconventional resources (in particular, the Marcellus and Utica shale plays).[150] NESCOE and the Massachusetts Department of Natural Resources have both completed extensive studies on solutions to New England's energy issues.[151] Both studies indicated that the best solution for combatting gas shortages is additional pipeline capacity flowing to the region.[152]

In response, major natural gas pipeline companies have announced plans to expand capacity to bring additional gas to the region and reverse flows of gas that historically transited from Eastern Canada into the United States. Spectra Energy's ("Spectra") proposed Atlantic Incremental Market ("AIM") project is designed to expand capacity throughout New England, from New York to Massachusetts.[153] Spectra has also proposed two other projects to bring greater quantities of gas to the Northeast: the Access Northeast project and the Atlantic Bridge project.[154] The Atlantic Bridge project proposes to expand the existing M&NP and Algonquin

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150 *See U.S. Market Impact Report*, *supra* note 10, at 12. *See also New England Market Impact Report*, *supra* note 11, at 8.

151 *New England Market Impact Report*, *supra* note 11, at 11.

152 *Id.*

153 *U.S. Market Impact Report*, *supra* note 10, at 13. On February 28, 2014, Algonquin Gas Transmission, LLC filed an application with FERC for the AIM project (which will be wholly owned by Spectra) in FERC Docket No. CP14-96-000. The AIM project is intended to bring additional supplies of natural gas to the Northeast, up to 342,000 dekatherms per day, through existing Algonquin Gas Transmission system. Most recently, FERC issued an Final EIS for the project on January 23, 2015. Spectra Energy, *Algonquin Incremental Market (AIM) Project*, http://www.spectraenergy.com/Operations/New-Projects-and-Our-Process/New-Projects-in-US/Algonquin-Incremental-Market-AIM-Project/ (last visited Feb. 23, 2015).

154 *U.S. Market Impact Report*, *supra* note 10, at 15. The Atlantic Bridge project entered prefiling at FERC on January 30, 2015 in FERC Docket PF15-12-000. As part of the project, Spectra proposes to expand the Algonquin Gas Transmission and M&NP pipeline systems to bring additional supplies of natural gas to New England and the Maritime provinces. The expansion capacity will be at least 100,000 Dth/day but the project can be scaled up to 600,000 Dth/day, depending on customer commitments. The open season for the Atlantic Bridge Project occurred from February 5, 2014 to March 31, 2014, and Unitil Corporation has been announced

Pipeline systems to deliver gas to New England and the northeastern United States and Canada. The Access Northeast project proposes to add pipeline capacity to the same two systems, bringing as much as one additional Bcf/day to New England.[155] Additionally, Kinder Morgan has proposed the Northeast Energy Direct project, which will transit gas from the Marcellus Shale region to the Dracut Hub in Massachusetts.[156]

Further, new Canadian demand for gas from the Marcellus and Utica shale regions leads producers to move gas out of fulsome shale basins into the market, bolstering the need for additional New England pipeline expansion projects. The Project will create an additional demand source that may contribute to the significant build-out of infrastructure needed in the Northeast.

New England's supply/demand balance will be further stabilized by the availability of storage in Eastern Canada.[157] Alton Natural Gas Storage is constructing a facility in Nova Scotia to store natural gas in underground salt caverns and a lateral to interconnect with the M&NP.[158] Storage facilities can help to alleviate winter price spikes on peaking days and help to prevent

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as an anchor shipper on the project. The current in-service date is November 2017. According to Spectra, the "Atlantic Bridge project's construction is expected to occur within existing rights-of-way and at company-owned facilities, thus having minimal effect on landowners, communities and the environment." *See* Spectra Energy, *Spectra Energy to Expand Pipeline Systems in New England*, News Archive (Feb. 5, 2014) http://www.spectraenergy.com/Newsroom/News-Archive/Spectra-Energy-to-Expand-Pipeline-Systems-in-New-England/.

155 The project will consist of several 200 MMcf/d expansions of the Algonquin and M&NP systems, depending on customer commitments. As a way to accommodate power generators and their resistance to hold firm capacity, Spectra is looking at Multiple Shipper Options where several shippers can share one contract ensuring maximum efficiency of capacity utilization of a single contract.

156 The Northeast Energy Direct project entered prefiling at FERC on September 15, 2014 in FERC Docket No. PF14-22-000. The project is proposed to bring an additional 2.2 Bcf/d of natural gas to New England. It proposes to add approximately 167 miles of new and co-located pipeline facilities and pipeline looping segments in Pennsylvania, and 177 miles of pipeline spanning from Wright, NY to Dracut, MA, as well as additional compression and other facilities. *See* Kinder Morgan, *Tennessee Gas Pipeline Northeast Energy Direct (NED) Project*, http://www.kindermorgan.com/business/gas_pipelines/east/neenergydirect/ (last visited Feb. 23, 2015). *See also U.S. Market Impact Report*, *supra* note 10, at 14.

157 *New England Market Impact Report*, *supra* note 11, at 14.

158 *Id*.

basis blowouts. On these days, local and regional needs in Nova Scotia can be served through withdrawals from storage, increasing the supply available to the Northeast from pipeline capacity, effectively helping to manage peaking demand.[159] This storage capability could allow the Bear Head Project to structure seasonal feed gas purchases in a manner that increases New England's access to additional supply when demand peaks, thus minimizing the Project impact on market prices and helping to restore regional supply/demand balance.[160]

Third, while not essential to the determination of this Application,[161] the Bear Head Project is strategically positioned to also access Canadian supply.[162] The interconnectivity of United States and Canadian markets lends even further support that natural gas supply is ample. North American supply of natural gas is forecasted to grow from 81 Bcf/d in 2013 to 139 Bcf/d in 2050, a roughly 72% increase.[163] The expansive pipeline infrastructure in North America, which allows the Project to access natural gas from potentially anywhere on the North American grid, reinforces the conclusion that there will be sufficient natural gas supply to meet demand.[164]

B. Other Public Interest Considerations

1. Benefits to the U.S. Economy

Bear Head LNG commissioned the *Perryman Report* to assess the economic and fiscal benefits of the proposed Bear Head Project on North America (with an emphasis on U.S. impacts).[165] According to the *Perryman Report*, the Bear Head Project will lead to substantial

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159 *Id.* at 14-15.

160 *Id.* at 15.

161 *See 2014 Oregon LNG Conditional Order*, *supra* note 88, at 133 (noting "[t]he potential availability of Canadian supplies reinforces [the conclusion that there will be sufficient domestic supply of natural gas to meet domestic demand] but is not essential to [DOE/FE's] determination.").

162 *Ziff Report*, *supra* note 12, at 9.

163 *Id.* at 2.

164 *Id.* at 41-44.

165 *Perryman Report*, *supra* note 13.

economic benefits in the United States during both the construction and operation phases of the Project, through increased economic activity, tax revenues, and job creation.[166] Notably, the Louisiana economy will experience growth because a significant portion of the necessary equipment for the Project is likely to be manufactured there[167] and the national economy will be stimulated by the effects of the Project on the exploration and production chain for natural gas extraction.[168] This national stimulus will have a multiplier effect, resulting in further economic growth due to additional wages, taxes and expenditures involved in the supply chain.

a. Construction and Pre-Operational Impacts

Expenditures during the life of the Project are projected to be approximately $3.68 billion for the United States as a whole, with $.93 billion occurring in Louisiana.[169] This is estimated to result in economic gains of over $1.1 billion in gross product for the United States and $0.4 billion for Louisiana.[170]

Significant U.S. job creation is also expected during the life of the Project. Overall, construction and preoperational spending is anticipated to result in the creation of 16,969 person-years of employment in the United States.[171] In particular, 4,445 person-years of employment are anticipated in Louisiana.[172] Additionally, tax revenue increases are projected on the federal, state, and local levels.[173]

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166 *Id.* at 1.

167 *Id.* at 4.

168 *Id.* at 1.

169 *Id.* at 8-9.

170 *Id.* at 9.

171 *Perryman Report*, *supra* note 13, at 8.

172 *Id.*

173 *Id.* at 1, 8.

b. Operational Impact

The economic impacts from the Bear Head Project once fully operational will be significant. As previously stated, Bear Head LNG intends to source natural gas as feedstock for the Project from the United States. This will stimulate natural gas production across the country, as the feedstock used could derive from any gas producing region in the United States, and put more gas into the interstate market. By promoting increased drilling and production activities, the Bear Head Project will create a multiplier effect by fostering additional investments in domestic natural gas basins and, thereby, will stimulate the U.S. economy as a whole. The *Perryman Report* suggests that in the aggregate, the Bear Head Project will induce additional economic growth associated with natural gas upstream development.

Over the first 25 years of the Bear Head Project's operations, the cumulative economic benefits in the United States from enhanced production are expected to include an approximate increase in gross product of $93.8 billion, and 988,553 person-years of employment.[174] If, as proposed above, gas were sourced from the Marcellus Shale region, gains would include an estimated $86.5 billion in gross product, as well as 920,099 person-years of employment in the Region.[175] Furthermore, the fiscal benefits accrued are projected to include approximately $6.8 billion to the federal government, $4.5 billion to state government, and $2.3 billion to local government.[176]

Annually, the average gross product stemming from production is estimated to be $3.45 billion in the Marcellus, and $3.75 billion nationwide.[177] Additionally, annual economic benefits from production include 36,804 person-years of employment in the Marcellus and 39,542

[174] *Id.* at 11.

[175] *Id.*

[176] *Id.*

[177] *Perryman Report, supra* note 13, at 12-13.

person-years of employment nationwide.[178] Annual fiscal benefits accrued are projected to include approximately $0.3 billion to the federal government, $0.2 billion to state government, and $0.1 billion to local government.[179]

2. International Considerations

a. Benefits to the Canadian Economy

Significant economic benefits will also accrue to Canada from the Project as the export terminal is located in Nova Scotia. During the construction and preoperational phases, increases in business activity stemming from the Bear Head Project are estimated to result in approximately $3.3 billion in gross product and 36,263 person-years of employment.[180] Specifically, in Nova Scotia, gains in business activity of approximately $2.4 billion in gross product and 24,302 person-years of employment are estimated as a result of the Bear Head Project's activities.[181] Nova Scotia will reap increased economic and fiscal benefits throughout the life of the Project, including continued employment, tax revenues, and stimulus to the local economy.

b. United States-Canada Trade Relationship

According to a recent assessment by the U.S. Department of State, "[t]he United States and Canada share the world's largest and most comprehensive trading relationship, which supports millions of jobs in each country."[182] It is not surprising that both nations are among the largest foreign investors in each other when the bilateral trade between the two nations exceeds

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178 *Id.* at 12.

179 *Id.* at 12-13.

180 *Id.* at 9.

181 *Id.*

182 U.S. Dept. of State, Bureau of Western Hemisphere Affairs, *U.S. Relations with Canada: Fact Sheet* (Sept. 10, 2014), http://www.state.gov/r/pa/ei/bgn/2089.htm.

$2 billion every day.[183] The United States is Canada's largest foreign investor, with a large portion of investment focused on natural resource-dependent industries such as mining and petroleum.[184] "Canada is one of the world's five largest energy producers and is the principal source of U.S. energy imports."[185]

To eliminate barriers in trade, two crucial agreements have been signed by the United States and Canada in the last 25 years. In 1989, the two countries signed an FTA that eliminated all tariffs by 1998, provided national treatment for goods including natural gas, and prohibited most import and export restrictions on energy products.[186] The 1989 FTA's "natural gas regulation consist[ed] of a series of energy measures," including "prohibit[ing] quantitative restrictions on imports and exports, minimum export-price requirements and minimum import-price requirements."[187] And in 1992, the United States, Canada, and Mexico signed the North American Free Trade Agreement ("NAFTA"), whose Chapter 6 further limited the United States' and Canada's abilities to restrict energy exports to one another.[188]

According to a recent report by the Congressional Research Service, the effects on economic activity of these agreements have been significant:

> U.S. trade with Canada more than doubled in the first decade of the FTA/NAFTA (1989-1999) from $166.5 billion to $362.2 billion. U.S. exports to Canada increased from $100.2 billion in 1993 to $300.2 billion in 2013, an increase of 200%. U.S. imports from Canada increased from $110.9 billion in 1993 to $332.1 billion in 2013, also a 200% increase […]. After falling off during the recession

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183 *Id.*

184 *Id.*

185 EIA, *Analysis Brief: Canada* (Sept. 30, 2013), *available at* http://www.eia.gov/countries/analysisbriefs/Canada/canada.pdf.

186 M. Angeles Villarreal & Ian F. Ferguson, Cong. Research Serv., R42965, *NAFTA at 20: Overview and Trade Effects*, at 2-3 (2014), *available at* http://fpc.state.gov/documents/organization/225882.pdf [hereinafter *NAFTA at 20*].

187 Robert C. Platt, *Trade in Natural Gas: The Changing Regulatory Framework*, 11 U. Pa. J. Int'l L. 415, 428 (1989-1990).

188 *See* Michael Holden, Parliamentary Info. & Research Serv., PRB 06-33E, *Canadian Oil Exports to the United States Under NAFTA*, at 1 (2006), *available at* http://www.parl.gc.ca/Content/LOP/researchpublications/prb0633-e.pdf.

> of 2001, total trade with Canada reached a new high of $596.5 billion in 2008, only to fall victim to the financial crisis in 2009 when it fell to $429.6 billion. In 2011, total trade had returned to 2008 levels at $597.3 billion.[189]

In more recent years since the execution of the agreements, the composition of trade between the United States and Canada has changed, with oil and gas displacing motor vehicles as Canada's largest export to the United States in 2005.[190] As a result of the 1989 FTA and NAFTA, the flow of goods and services has flourished, particularly in the oil and gas sector, making the two nations' economic relationship the largest in the world. In granting this Application as requested, DOE/FE would be "promot[ing] national economic policy by reducing barriers to foreign trade and stimulating the flow of goods and services between the United States and Canada, both of which are signatories to [NAFTA]."[191]

c. Geopolitical Benefits

Global international considerations also support the export of LNG requested herein. North America is emerging as a major source of natural gas supply in the global market. This shift will bring significant geopolitical benefits to the United States in the form of increased energy independence and security, public interest factors specifically identified by DOE/FE in prior decisions.[192] Such benefits result in increased diplomatic freedom and international influence, which allows the United States to segue from an energy dependent nation to a global energy power player on the international stage.[193] Further, such a shift bolsters the United

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189 *NAFTA* at *20*, *supra* note 186, at 13.

190 *Id.* at 21.

191 *Maritimes Bidirectional Order supra* note 18 at P 10.

192 *The Land of Opportunity*, *supra* note 28, at 6-7; *America's Energy Edge*, *supra* note 28.

193 *America's Energy Edge*, *supra* note 28.

States' political position internationally,[194] resulting in better leverage and reinforced alliances with global trading partners.[195]

Additionally, increased production of natural gas serves to bolster the U.S. position globally in climate change discussions. The increased use of natural gas helps the United States to meet its climate goals and gives the United States increased credibility on the international stage as it attempts to encourage other nations to decrease their emissions.[196] One recent example is the EPA's proposed Clean Power Plan, which promotes the use of cleaner natural gas-fired generation instead of coal-fired generation in power plants. In discussing its efforts to assist other nations in decreasing their carbon emissions, the Obama Administration has stated that it "will promote fuel-switching from coal to gas for electricity production and encourage the development of a global market for gas."[197] The export of LNG to countries where natural gas can also displace coal consumption supports the United States' climate goals.

IX.
ENVIRONMENTAL IMPACT

Bear Head LNG respectfully submits that notwithstanding DOE/FE's ample discretion to prepare NEPA documentation in any circumstance,[198] in this case, a determination that a

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194 Jason Bordoff and Trevor Houser, *American Gas to the Rescue? The Impact of U.S. LNG Exports on European Security and Russian Foreign Policy*, at 6, Columbia Center on Global Energy Policy (September 2014).

195 *America's Energy Edge*, *supra* note 28. *See also* Jason Bordoff and Trevor Houser, *American Gas to the Rescue? The Impact of U.S. LNG Exports on European Security and Russian Foreign Policy*, Columbia Center on Global Energy Policy (September 2014); and *Cameron LNG Order No. 3391-A*, *supra* note 9, at 8.

196 The President's Climate Action Plan, Exec. Office of the President (June 2013). [hereinafter *Climate Action Plan*]. The Obama Administration's Climate Action Plan specifically highlights U.S. leadership in reducing international carbon emissions as a key goal of the plan and notably asserts that assisting emissions heavy countries like China in meeting their climate goals is crucial to this objective. Providing increased access to lower cost natural gas supplies from North America will facilitate this aim.

197 *Id.* at 18.

198 10 C.F.R § 1021.300(b) ("Notwithstanding any other provision of these regulations, DOE may prepare a NEPA document for any DOE action at any time in order to further the purposes of NEPA . This may be done to analyze the consequences of ongoing activities, support DOE planning, assess the need for mitigation, fully disclose the potential environmental consequences of DOE actions, or for any other reason …").

categorical exclusion applies is appropriate and consistent with DOE/FE precedent and well-established NEPA principles. A categorical exclusion is appropriate because the Project does not involve the construction of any U.S. facilities and there are no connected actions that have been improperly segmented.[199] Furthermore, the Project is not expected to have individual or cumulative significant environmental impacts in the United States.[200] Notwithstanding the foregoing, Bear Head LNG commissioned two reports from SNC-Lavalin, submitted herewith as Appendices F and G, to assist DOE/FE in making a "fully informed and well-considered decision" on potential environmental impacts when conducting their public interest analysis of the Project.[201]

In the context of U.S. natural gas and LNG export projects, DOE/FE has served as a cooperating agency in FERC's NEPA review process, relying on NEPA documentation prepared by FERC and adopting its conclusions for purposes of meeting its NEPA responsibilities and fulfilling its duty to examine environmental factors as a public interest consideration under the NGA. However, in the case of the Bear Head Project, construction and operation of the Project will occur in Canada, and the Project has been, and will continue to be, reviewed and authorized

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199 "'Segmentation' or 'piecemealing' occurs when an action is divided into component parts, each involving action with less significant environmental effects." *Town of Huntington v. Marsh*, 859 F.2d 1134, 1142 (2d Cir. 1988) (citing *City of W. Chicago v. United States Nuclear Regulatory Comm'n*, 701 F.2d 632, 650 (7th Cir. 1983)). "Segmentation is to be avoided in order to 'insure that interrelated projects[,] the overall effect of which is environmentally significant, not be fractionalized into smaller, less significant actions.'" *Town of Huntington*, 859 F.2d at 1142 (citing *Taxpayers Watchdog, Inc. v. Stanley*, 819 F.2d 294, 298 (D.C. Cir. 1987)).

200 Categorical exclusions apply in the case of actions the implementing agency has determined are not expected to have individually or cumulatively significant environmental impacts. *See* 40 C.F.R. § 1508.4; *see also* Final Guidance on Improving the Process for Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act, 77 Fed. Reg. 14,473 (2012) [hereinafter *CEQ Guidance*].

201 The NEPA mandate "is essentially procedural" and is designed to "insure a fully informed and well-considered decision" *Delaware Riverkeeper Network v. F.E.R.C.* 753 F.3d 1304, 1309-10 (D.C. Cir. 2014) (quoting *Vt. Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978)). "… NEPA imposes only procedural requirements on federal agencies with a particular focus on requiring agencies to undertake analyses of the environmental impact of their proposals and actions." *Delaware Riverkeeper Network*, 753 F.3d at 1310 (internal citation omitted).

by the relevant Canadian environmental administrative bodies; not FERC. As such, DOE's NEPA implementing regulations call for a determination by DOE/FE as to whether preparation of an EIS or an EA is necessary or whether a categorical exclusion applies.[202]

As defined in the CEQ Regulations and prescribed by the CEQ Guidance, categorical exclusions apply in certain categories of actions the implementing agency has determined are not expected to have individually or cumulatively significant environmental impacts.[203] DOE's regulations set forth a categorical exclusion for actions related to authorizations for the export of natural gas under Section 3 of the NGA that involve minor operational changes (such as changes in natural gas throughput, transportation and storage operations) but not new construction.[204] Such is the case in the instant Application. As referenced above, the Project's location is in Canada and does not involve the construction or operation of any LNG export facilities in the United States. Nor does this Application involve the construction or operation of any pipeline facilities in the United States. While Bear Head LNG acknowledges that modification and even expansion of the M&NP system likely is required to enable the delivery of the full amount of the requested feedgas volumes to the Project, the precise nature of such modifications and expansion

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202 10 C.F.R. § 1021.300(a)(1)-(3).

203 40 C.F.R. § 1508.4; *see also CEQ Guidance*, *supra* note 200.

204 DOE's procedures implementing NEPA include a categorical exclusion for actions like the one proposed in this Application that do not involve new construction: "Approvals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under Section 3 of the NGA that involve minor operational changes (such as changes in natural gas throughput, transportation, and storage operations) but not new construction." 10 C.F.R. Part 1021, Subpart D, Appendix B, B5.7 (*Import or export of natural gas, with operational changes*). DOE/FE recently has applied the categorical exclusion set out at B5.7 in the context of proposed LNG exports from the United States. *See Carib Energy (USA) LLC, Categorical Exclusion Determination*, DOE/FE Docket No. 11-141-LNG (May 30, 2014). *See also ConocoPhillips Alaska Natural Gas Corp., Categorical Exclusion Determination*, DOE/FE Docket No. 13-155-LNG (Apr. 3, 2014) (applying a categorical exclusion to ConocoPhillips' application to engage in exports of LNG to non-FTA nations under circumstances which require no new facilities or modifications to existing facilities**)**. Proposed actions within a categorical exclusion category do not require further analysis and documentation in an EA or an EIS. 10 C.F.R. § 1021.400. A categorical exclusion can be used after determining that a proposed action falls within the categories of actions described in the categorical exclusion and that there are no extraordinary circumstances indicating further environmental review is warranted. *Id.* at § 1021.410.

is unknown at this time—and may remain unknown until such time as Bear Head LNG customers enter into commercial arrangements for gas supply and firm pipeline transportation.[205]

To determine whether NEPA requires consideration of a particular impact or effect,[206] agencies must look at the relationship between the effect of the proposed action and the change in the physical environment caused by the major federal action at issue.[207] The federal action that may be said to affect the environment in this case would be DOE/FE's authorization of Bear Head LNG's proposed natural gas and LNG exports as requested in this Application. But DOE/FE action on this Application does not equate to the approval of the construction or operation of any LNG export facilities, or associated pipeline facilities, which potentially would give rise to impacts affecting air, aquatic and terrestrial environments to be considered under NEPA. Indeed, the Project is proposed nearly 300 miles from the proposed point of export at the U.S.-Canada border on the M&NP system, and the proposed exports would not occur until 2019 at the earliest.[208] Moreover, DOE precedent is clear that NEPA's reach does not extend beyond the territorial boundaries of the United States.[209]

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[205] To further complicate matters, there is also the possibility that feedstock for the Project may come from Canadian sources, which could significantly reduce firm transportation capacity demand on the U.S. M&NP system. *See supra* note 49 and accompanying text.

[206] The terms "effects" and "impacts" are synonymous. 40 C.F.R. § 1508.8.

[207] CEQ Regulations require an agency preparing an EIS to consider the "direct," "indirect," and "cumulative" impacts of a proposed action. *Id.* at § 1508.25. "Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." *Id.* at § 1508.8.

[208] As detailed in the Canadian Authorizations Overview, construction and operation of the Project will occur wholly within Canada, and the environmental impacts associated therewith have been, and will continue to be, reviewed by the relevant Canadian administrative bodies with permitting authority.

[209] Recently, DOE has explicitly disagreed with comments to evaluate the potential environmental impacts from construction of facilities in Canada in connection with Champlain Hudson Power Express Inc.'s application to construct, operate, maintain, and connect the U.S. portion of an electric transmission line that would cross the U.S.-Canada border. DOE – Office of Electricity Delivery and Energy Reliability, *Final Champlain Hudson Power Express Transmission Line Project Environmental Impact Statement*, at 1-19 and 1-20 (August 2014), *available at* http://energy.gov/nepa/eis-0447-champlain-hudson-power-express-transmission-line-project-new-york. "NEPA does not require an analysis of potential environmental impacts that occur solely within another sovereign nation with its own environmental statutes and regulations that result from actions approved by that

Bear Head LNG's proposal has not been improperly segmented to meet DOE's requirements for a CE. Improper segmentation occurs when ***contemporaneously-proposed*** "connected actions" are ***pretextually*** treated as distinct for purposes of NEPA review, in order to downplay their overall environmental impact.[210] As previously mentioned, there are no pipeline modification or expansion projects proposed in conjunction with the instant Application. It is well established that improper segmentation only arises where there are multiple ***proposed*** actions, not where there is merely the ***possibility*** of future action.[211] The fact that it may be reasonably foreseeable that pipeline modifications and expansions may occur over the proposed 25-year term of this Application has no bearing on segmentation.[212] To find otherwise would be fundamentally unworkable because it would prevent Bear Head LNG from pursuing

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sovereign nation.". *Id.* at 1-20. "[Executive Order 12114] does not require Federal agencies to evaluate impacts outside the United States when the foreign nation is participating with the United States. or is otherwise involved in the action …. The Quebec Provincial Government is conducting an environmental review for impacts in Canada, as applicable, as part of its authorization process with construction of facilities … in the province. The Canadian Government, through the National Energy Board, would also have the authority to authorize the project and consider potential environmental impacts in its analysis." *Id.* at 1-20; *see generally Empire State Pipeline et al.*, 61 FERC ¶ 61,091, at 14 (Oct. 21, 1992) ("In such instances, where the foreign country will conduct its own environmental review of the foreign facilities, and where no United States' funding will be utilized for the foreign facilities, [FERC] is not required under NEPA to examine the environmental impact of such facilities.").

210 *See Sabine Pass Liquefaction, LLC, and Sabine Pass LNG, L.P.*, 144 FERC ¶ 61,099, at PP 30, 33 (2013).

211 *See, e.g.*, *Tenn. Gas Pipeline Co.*, 142 FERC ¶ 61,025, at P 40 (2013) ("The courts have held that improper segmentation is usually concerned with projects that have reached the proposal stage.") [hereinafter *TGS FERC Order*]; *Webster v. USDA*, 685 F.3d 411, 427 (4th Cir. 2012) ("In the absence of any impending plans to construct such a system or facility, segmentation is not a concern."); *Save Barton Creek Ass'n v. Fed. Highway Admin.*, 950 F.2d 1129, 1136 (5th Cir. 1992) (rejecting improper segmentation argument where the allegedly segmented action had not "yet acquired the status of a formal proposal requiring federal approval."); *see also Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976) ("[W]hen several proposals for . . . actions that will have cumulative or synergistic environmental impact upon a region are ***pending concurrently*** before an agency, their environmental consequences must be considered together.") (emphasis added); *Envtl. Def. Fund v. Marsh*, 651 F.2d 983, 999 n.19 (5th Cir. 1981) (stating that, under *Kleppe*, an improper segmentation problem could theoretically arise even where one action had yet to be formally proposed, "if an agency has egregiously or arbitrarily violated the underlying purpose of NEPA," but holding that such had not been the case).

212 *See, e.g.*, *TGS FERC Order*, *supra* note 211, at P 45 (stating that "[w]e also disagree with Sierra Club's assertion that the subsequent projects are 'reasonably foreseeable' and thus the EA's failure to consider them provides further proof of improper segmentation…" because "… whether subsequent projects are 'reasonably foreseeable'" is not "relevant" to segmentation); *see also O'Reilly v. U.S. Army Corps of Eng'rs*, 477 F.3d 225, 237 (5th Cir. 2007) (rejecting the argument "that the current project is wrongly piecemealed because Phases II and III are reasonably foreseeable").

development of the Project until the precise transportation path for feedgas deliveries nearly 300 miles away is ascertained. Such a result would not be desirable from a public policy perspective, nor would it be consistent with well-established precedent under NEPA.[213]

There would be no segmentation problem where, as Bear Head LNG proposes here, DOE grants a categorical exclusion for the instant Application, and FERC evaluates the effects of any subsequently proposed pipeline modification or expansion proposed in response to changed market conditions.[214] "Segmentation analysis functions to weed out projects which are pretextually segmented, and for which there is no independent reason to exist."[215] Under the "independent utility" standard for connected actions,[216] a subsequent project is not improperly

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[213] *See, e.g.*, *TGS FERC Order*, *supra* note 211, at P 39 (rejecting Sierra Club's improper-segmentation argument, and adding that "Sierra Club's approach is unworkable, would unduly delay natural gas infrastructure development, and is not required by NEPA."); *see also Nw. Res. Info. Ctr. v. Nat'l Marine Fisheries Serv.*, 56 F.3d 1060, 1069 (9th Cir. 1995) ("[W]e . . . cannot force an agency to aggregate diverse actions to the point where problems must be tackled from every angle at once. To do so risks further paralysis of agency decisionmaking.").

[214] *See, e.g.*, *Taxpayers Watchdog, Inc.*, 819 F.2d at 298–300 (holding NEPA analysis for rail system was not required to consider future expansion, even though "expansion of the rail system may be desirable" and had been contemplated); *Vieux Carre Prop. Owners, Residents & Assocs., Inc. v. Pierce*, 719 F.2d 1272, 1277–78 (5th Cir. 1983) (holding NEPA analysis for second phase of development project had not improperly excluded third phase, because third phase had not been formally proposed, nor funding secured for it); *Minn. Pollution Control Agency v. U.S. Nuclear Regulatory Comm'n*, 602 F.2d 412, 416 n.5 (D.C. Cir. 1979) (rejecting argument that agency was required to consider "further expansion" that plaintiff characterized as "inevitable," and finding no "consequence of future expansion that could not be adequately considered at the time of any requests for further expansion"); *see also Nw. Res. Info. Ctr., Inc.*, 56 F.3d at 1068 (discussing precedent holding NEPA analyses need not consider subsequent development phases); *N. Idaho Community Action Network v. U.S. Dep't of Transp.*, No. 05-0273-N-EJL, 2008 WL 838718, at *3 (D. Idaho Mar. 27, 2008) (holding subsequently-proposed expansion had not been improperly segmented from initial highway project proposal, and noting that cases finding NEPA violation "did not involve subsequent changes to an initial plan," but instead "separate projects . . . that were improperly segmented"), *aff'd in part, rev'd in part on other grounds*, 545 F.3d 1147 (9th Cir. (Idaho) 2008).

[215] *Save Barton Creek*, 950 F.2d at 1139 (citation and internal quotation marks omitted); *see also Highway J Citizens Grp. v. Mineta*, 349 F.3d 938, at 962 (7th Cir. 2003). ("The purpose of segmentation review is not for a court to decide whether or not an agency drew the correct lines when putting the boundaries on its projects.").

[216] *See, e.g.*, *TGS FERC Order*, *supra* note 211, at P 41 (2013) (rejecting improper segmentation argument where "[e]ach of the four projects that Sierra Club identifies has independent utility"); *see also O'Reilly*, 477 F.3d at 237 (holding that dredge and fill permit for residential subdivision development project was not improperly segmented, in part because the different phases had "independent utility"). The test for independent utility is "whether one project will serve a significant purpose even if a second related project is not built." *Hammond v. Norton*, 370 F. Supp. 2d 226, at 247 (D.D.C. 2005) (citing *Coal. on Sensible Transp. v. Dole*, 826 F.2d 60, at 68 (D.C. Cir. 1987)). "The commercial and financial viability of a project when considered in isolation from other

segmented when it is proposed in response to market demand. Without a doubt, achieving natural gas supply diversity is the commercially desirable outcome, which is the premise for Bear Head LNG's filing of the instant Application and its prior Canadian NG Application. But the availability of abundant Canadian natural gas supplies demonstrates that the Project is not strictly dependent on U.S. natural gas. Moreover, potential New England expansions are certainly not dependent on the Bear Head Project as they are economically distinct; each would be commercially viable without the other. Arguably, under such circumstances, NEPA review of speculative U.S. pipeline construction would be rendered irrelevant.

Neither does NEPA precedent support environmental analysis of speculative pipeline projects as part of a cumulative impacts analysis. Cumulative impact "is the impact on the environment which results from the incremental impact of the action when added to other past, present, and ***reasonably foreseeable*** future actions … ."[217] An impact is reasonably foreseeable, and thus should be considered in a NEPA analysis, "if it is 'sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.'"[218] "NEPA does not require an agency to 'engage in speculative analysis' or 'to do the impractical, if not enough information is available to permit meaningful consideration.'"[219] Thus, DOE's precedent does

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actions is potentially an important consideration in determining whether the substantial independent utility factor has been met." *Delaware Riverkeeper Network*, 753 F.3d at 1316.

[217] 40 C.F.R. § 1508.7 (emphasis added).

[218] *N. Baja Pipeline, LLC*, 123 FERC ¶ 61,073, at P 39 (2008) (quoting *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992)).

[219] *Cheniere Creole Trail Pipeline, L.P.*, 145 FERC ¶ 61,074, at P 15 (2013) (quoting *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1078 (9th Cir. 2011)). DOE precedent also consistently has established that its obligations under NEPA do not require that it consider the effects of natural gas drilling that would be induced by LNG exports because such effects are speculative and, thus, not reasonably foreseeable. *See, e.g.*, *Cameron LNG, LLC, 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, DOE/FE Order No. 3391-A, FE Docket No. 11-162-LNG,* at 73 (Sept. 10, 2014); *Freeport LNG Expansion, L.P. at al., Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel From The Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations, DOE/FE Order No. 3357-B, FE Docket No. 11-161-LNG,*

not require discussion of the cumulative impacts of actions that are merely ***possible***, rather than reasonably foreseeable.[220]

And again, in the broader context of complex energy infrastructure projects, it would be untenable to require that all potential future upstream pipeline modifications or expansions be reviewed under NEPA before granting the initial DOE/FE authorization.[221] Some impacts or effects that are "caused by" a change in the physical environment in the sense of "but for" causation, will nonetheless not fall within NEPA review because the causal chain is too attenuated.[222] For example, one could argue that "but for" DOE/FE's authorization of the exports requested herein, increased pipeline infrastructure in the Northeast would not occur. However, it is difficult to consider increased pipeline infrastructure as proximately caused by the action of DOE/FE if the environmental effects from increased pipeline infrastructure is directly caused by the action of third-party pipeline companies over which the DOE/FE typically has no jurisdiction over. The environmental review of projects seeking to construct a facility to transport

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at 84 (Nov. 14, 2014); *Sabine Pass Liquefaction, LLC, Final Opinion and Order Granting Long-Term Authorization to Export Liquefied Natural Gas From Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations, DOE/FE Order No. 2961-A, FE Docket No. 10-111-LNG,* at 28 (Aug. 7, 2012).

220 *See, e.g.*, *Tex. E. Transmission, LP*, 127 FERC ¶ 61,162, at P 19 (2009) (stating that "possible future projects" that were "in preliminary stages of development and had not been proposed to the Commission for review" did not qualify as "reasonably foreseeable"); *see also Tex. E. Transmission, LP*, 131 FERC ¶ 61,164, at P 32 (2010) ("The evidence submitted here does not establish that either the Emerald mine near Texas Eastern's pipeline or Freeport's ***potential*** mine are reasonably foreseeable within the intent and meaning of our regulations.") (emphasis added); *Altamont Gas Transmission Co.*, 56 FERC ¶ 61,199, (1991) (rejecting argument that NEPA analysis was required to consider "other projects which ***might*** be proposed in the future…" because "an analysis of any such cumulative impacts would be entirely speculative and impossible to make.") (emphasis added).

221 *See Islander E. Pipeline Co. and Algonquin Gas Transmission Co.*, 102 FERC ¶ 61,054, at P 49 (2003) ("[W]e note that pipeline companies consider and analyze potential projects regularly that do not always evolve to fruition.").

222 A "but for" causal relationship is not enough to make an agency responsible for a particular effect under NEPA. *U.S. Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004). "NEPA requires a reasonably close causal relationship between the effect and the alleged cause. *Id.* (internal citation and internal quotation marks omitted) "… [A] plaintiff mounting a NEPA challenge must establish that an alleged effect will ensue as a 'proximate cause,' in the sense meant by tort law, of the proposed agency action." *City of Shoreacres v. Waterworth*, 420 F.3d 440, 452 (5th Cir. 2005) (internal citations omitted).

natural gas in interstate commerce falls strictly within FERC's jurisdiction under the NGA.[223] Bear Head LNG fully anticipates that any U.S. pipeline modification or expansion that may be necessary will be considered by FERC in full compliance of NEPA mandates.

Nonetheless, to help inform DOE/FE's public interest review of environmental impacts related to its proposed exports, Bear Head LNG is submitting two reports: the *Canadian Authorizations Overview* (submitted herewith as Appendix F) and the *M&NP Requirements Report* (filed as privileged and confidential as Appendix G). [224] The *Canadian Authorizations Overview* provides a detailed summary of the applicable Canadian regulatory framework used to review the environmental impacts of the Project and a listing of all applicable Canadian Federal, provincial and local environmental review legislation for the Project, including the status of review or issuance of the permits, clearances, and authorizations required by such legislation.[225] The *M&NP Requirements Report* is an independent report prepared by SNC-Lavalin analyzing the potential modification and expansion of the M&NP system, which Bear Head LNG

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223 15 U.S.C. § 717f(c)(1)(A).

224 *See supra* notes 16 and 17.

225 The Canadian Authorizations Overview also includes a listing of the industry standards and practices the Project will adhere to, including U.S. standards that Canada has adopted. The United States and Canada collaborate extensively on environmental policy. The most prominent initiative between the sovereigns is the U.S.-Canada Clean Energy Dialogue launched by President Obama and Prime Minister Harper in February 2009 to encourage the development of clean energy technologies to reduce greenhouse gases and combat climate change. *See* DOE, Office of International Affairs, *U.S.-Canada Clean Energy Dialogue (CED)* (last visited Feb. 22, 2015), http://www.energy.gov/ia/initiatives/us-canada-clean-energy-dialogue-ced. Furthermore, Canada is an ally of the United States in international climate change negotiations and participates in various U.S.-led environmental forums, including: the Major Economies Forum on Energy and Climate; the Asia Pacific Partnership on Clean Development and Climate (aims to accelerate the development and deployment of clean energy technologies in major industrial sectors); and the International Carbon Sequestration Leadership Forum (researches effective ways to capture and store carbon dioxide). *See* Embassy of the United States, Ottawa, Canada, *U.S.-Canada Relations, Environment* (last visited Feb. 22, 2015), http://canada.usembassy.gov/canada-us-relations/environment.html.

contemplates will interconnect with the Project's proposed pipeline header near Goldboro, Nova Scotia for the delivery of natural gas feedstock to the Project.[226]

Feed gas for the Project will be delivered through the existing M&NP system. As described in the *M&NP Requirements Report*, Bear Head LNG anticipates relatively minor modifications to the M&NP will be required to increase the bi-directional flow of gas from the United States to Canada.[227] Bear Head LNG also expects that an expansion of the M&NP requiring FERC review and approval would be required to accommodate a portion of the full volume of the natural gas proposed to be exported in this Application. As such, the M&NP Requirements Report also considers the potential expansion of the M&NP system.[228]

The difficulty, however, is the precise nature and location of the required changes to accommodate the volume increase of bi-directional gas flow cannot be determined until Bear Head LNG finalizes commercial arrangements with customers of the Project. At this time, Bear Head LNG has neither entered into any agreements with Maritimes relating to the modification or expansion of the M&NP system, nor is Bear Head LNG aware of a pending proposal by

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[226] M&NP's current operations involve moving gas from Canada to the United States (*i.e.*, north to south). Existing capacity on the U.S. portion of the M&NP system is 833,317 MMBtu/d, including at the existing cross-border facilities previously authorized by FERC to be used for the additional purpose of exporting gas to Canada. *See Maritimes Bidirectional Order*, *supra* note 18, at P 3. An operational reversal of the M&NP would be required in the first instance to enable gas supplies to flow on a firm basis from south to north (*i.e.*, from the Dracut, MA delivery point on the M&NP system to the Project pipeline header). As discussed in the *M&NP Requirements Report*, with minor modification of the existing facilities, incremental reverse transportation capacity would be available on the M&NP to transport significant gas volumes from Dracut, MA to the U.S.-Canada border. With the addition of compression and looping the system, incremental reverse capacity would be available to accommodate the full volume of Bear Head LNG's proposed natural gas exports to the U.S.-Canada border.

[227] In 2009, Maritimes obtained authorization from FERC to use its existing M&NP cross-border facilities for the additional purpose of exporting gas to Canada. *See Maritimes Bidirectional Order*, *supra* note 18, at P 10 ("We find that granting the applicant's request for authority to use its existing border facilities for the export, as well as the import, of natural gas will promote national economic policy by reducing barriers to foreign trade and stimulating the flow of goods and services between the United States and Canada, both of which are signatories to the North American Free Trade Agreement, providing for fewer restrictions on natural gas imports and exports.") But the M&NP currently and primarily operates to transport natural gas from Canada to the United States, even though it currently has limited bi-directional capability.

[228] *M&NP Requirements Report*, *supra* note 17, at 11-13.

Maritimes for such modification or expansion.[229] Given the current speculative nature of potential future modification or expansion of the M&NP system at this time, Bear Head LNG believes that the environmental impacts associated with any such future action cannot be meaningfully analyzed in the context of this Application; thus, NEPA EIS and EA preparation requirements are not triggered by DOE/FE action on the Application, and Bear Head LNG believes that a categorical exclusion should be granted. However, if DOE/FE finds that potential future modifications or expansions to the M&NP must be analyzed, Bear Head has provided the following information, in conjunction with the information in the M&NP Requirements Report.

Maritimes currently holds an authorization from FERC to use its existing M&NP cross-border facilities for the additional purpose of exporting gas to Canada.[230] However, the existing configuration of the FERC certificated M&NP facilities does not allow the physical flow of gas through those cross-border facilities into Canada beyond a maximum of [redacted] Mmscf/d and, in winter peak, [redacted] Mmscf/d.[231] But with minor modifications, as described in the *M&NP Requirements Report*, the M&NP would be capable of transporting up to [redacted] Mmscf/d and, in winter peak, [redacted] Mmscf/d of natural gas to the U.S.-Canada border.[232] No significant environmental impacts associated with the construction and operations related to those minor modifications would occur, as detailed in Sections 4.2 and 4.3 of the *M&NP Requirements Report.*

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229 Bear Head LNG understands that Maritimes has not undertaken any field work or consulted with or contacted landowners or federal and state agencies to identify potential issues associated with the modifications or expansion of the M&NP system; nor has Maritimes undertaken a preliminary environmental review of the natural resources potentially affected by any such pipeline construction.

230 *Maritimes Bidirectional Order*, *supra* note 18, at P 11.

231 *M&NP Requirements Report*, *supra*, note 17, at 9.

232 *Id.* at 10.

To transport the incremental volume of natural gas required to accommodate Bear Head LNG's total request, an expansion of the M&NP would be required. Such expansion necessarily would involve greater environmental impacts than the minor modifications. However, if ground-disturbing activities occur within previously-disturbed areas and looping is done within the existing right-of-way of the pipeline facilities (all as contemplated in Section 4.4 of the *M&NP Requirements Report*), the expansion impacts would be significantly reduced. In any event, expanding the existing M&NP carries considerably fewer impacts than the construction of greenfield facilities.

The analysis provided in the *M&NP Requirements Report* was prepared in accordance with sound engineering and environmental principles consistent with industry standards. Bear Head LNG respectfully submits that DOE/FE may reach a favorable public interest determination as to potential environmental impacts of the Project on the basis of the *M&NP Requirements Report.*

However, to the extent DOE/FE determines that a categorical exclusion is not warranted, and that NEPA documentation requirements are triggered, Bear Head LNG respectfully submits that at a minimum, the *M&NP Requirements Report* supports a Finding of No Significant Impact ("FONSI") for the modifications potentially required to enable the transportation of up to [redacted] Mmscf/d and, in winter peak, [redacted] Mmscf/d, of natural gas on the M&NP to the U.S.-Canada border. Should DOE/FE determine that additional environmental review and analysis would be necessary for the expansion potentially required to enable transportation beyond [redacted] Mmscf/d and, in winter peak, [redacted] Mmscf/d, of natural gas on the M&NP to the U.S.-Canada border, then Bear Head LNG respectfully requests that DOE/FE bifurcate Bear Head LNG's request for LNG Non-FTA Authorization as follows: issuing by June 30, 2015 (i) a final order granting the LNG

Non-FTA Authorization for a volume up to [redacted] Mmscf/d [redacted] Bcf/y, which is the equivalent of [redacted] mtpa), on the basis that the *Maritimes Requirements Report* may function as an applicant-prepared EA and help advance DOE/FE's timeline for issuance of an EA and FONSI;[233] and (ii) a conditional order pursuant to Section 590.402 of DOE regulations for the remaining LNG volume requested in this Application,[234] contingent on completion of NEPA review by FERC of any expansion of the M&NP system related to LNG exports from the Project, filed with FERC within 10 years from the date of issuance of the LNG Non-FTA Authorization requested herein.

Therefore, Bear Head LNG respectfully submits that DOE/FE may satisfy its NEPA requirements by determining that the proposed action is categorically excluded from the preparation of either EA or an EIS because approval of the Application will not significantly affect the quality of the human environment within the meaning of NEPA.

X.
LEGAL STANDARD AND REQUEST FOR REVIEW UNDER NGA SECTION 3(c)

The legal framework arising under Section 3 of the NGA requires a license from DOE/FE to export natural gas from the United States to Canada or to any other foreign nation.[235] Depending on where the U.S. natural gas is being exported, DOE/FE applies one of two legal standards found in Section 3 of the NGA: the Section 3(a) standard or the Section 3(c) standard.[236]

Exports to nations with which the United States does *not* have an FTA in place requiring national treatment for trade in natural gas and LNG are reviewed pursuant to Section 3(a) of the

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233 40 C.F.R. § 1508.13.

234 10 C.F.R § 590.402.

235 *See* 15 U.S.C. § 717b.

236 *Id*. at § 717b(a), (c).

NGA.[237] Subsection (a) creates a rebuttable presumption that exports to non-FTA nations are in the public interest,[238] but allows DOE/FE broad discretion to assess and make a public interest determination prior to acting on an application. Section 3(a) also allows DOE/FE discretion to attach terms and conditions to orders authorizing exports to non-FTA nations as it deems necessary or appropriate to protect the public interest.[239]

Exports to nations with which the United States *does* have an FTA in place requiring national treatment for trade in natural gas and LNG are reviewed pursuant to Section 3(c) of the NGA.[240] Under subsection (c), exports to FTA nations "*shall* be deemed to be consistent with the public interest, and applications for such … exportation *shall* be granted without modification or delay."[241] Significantly, DOE/FE has interpreted Section 3(c) of the NGA as having "eliminated any public interest analysis by DOE of applications to export natural gas, including LNG, to qualified FTA [nations] …"[242]

Through the Energy Policy Act of 1992 ("EPAct 1992"), Congress added the mandatory language at issue to the NGA..[243] Prior to EPAct 1992, NGA Section 3 set forth a single legal

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237 *Id*. at § 717b(a).

238 *See id*. ("[DOE/FE] shall issue such order upon application, *unless*, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest.") (emphasis added); *see, e.g., Freeport LNG Expansion, L.P. et. al., Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas, to Non-Free Trade Agreement Nations*, DOE/FE Order No. 3357-B, FE Docket No. 11-161-LNG, at 9 (Nov. 14, 2014) ("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 opponents of the application overcome that presumption by making an affirmative showing of inconsistency with the public interest.").

239 *See* 15 U.S.C. § 717b(a) ("[DOE/FE] may by its order grant such application, in whole or in part, with such modification and upon such terms and conditions as [DOE/FE] may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as it may find necessary or appropriate.").

240 *Id*. at § 717b(c).

241 *Id*. (emphases added).

242 *Sabine Pass Liquefaction, LLC, Opinion and Order Denying Request for Review under Section 3(c) of the Natural Gas Act*, DOE/FE Unnumbered Order, FE Docket No. 10-111-LNG, at 6 (Oct. 21, 2010).

243 Pub. L. No. 102-486, § 201, 106 Stat. 2776, 2866 (1992).

standard, which remains applicable today only for applications seeking authorization to export natural gas to non-FTA nations.[244] EPAct 1992, however, eliminated any DOE/FE discretion to make a public interest determination regarding applications seeking authorization to export natural gas to FTA nations. Due to the enactment of EPAct 1992, NGA Section 3 imposes a mandatory duty on DOE/FE to grant an application for authorization to export natural gas to Canada "without modification or delay" and allows for no discretionary exceptions to this requirement.

Bear Head LNG respectfully submits that granting the requested authorizations without modification or delay in accordance with the standard of review found in Section 3(c) of the NGA is warranted for the following three reasons:

First, the United States and Canada are signatories to NAFTA, which calls for national treatment for trade in natural gas and LNG.[245] In this regard, the plain text of the NGA requires that DOE/FE apply the NGA Section 3(c) standard to all exports of natural gas or LNG to Canada.[246]

Second, there is no regulatory gap to be filled by DOE/FE in regulating subsequent exports of LNG from Canada. Such exports are subject to NEB oversight and are evaluated in accordance with the NEB's surplus criterion, which Bear Head LNG believes is implemented in

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[244] *See* Pub. L. No. 75-688, § 3, 52 Stat. 821, 822 (1938) (codified as amended at 15 U.S.C. § 717b(a)).

[245] *See* NAFTA, Art. 606, U.S.-Can.-Mex., Dec. 17, 1992, 32 I.L.M. 289 & 32 I.L.M. 604 (1993).

[246] *See* 15 U.S.C. §717b(c) (stating exports to FTA nations "*shall* be deemed to be consistent with the public interest, and applications for such … exportation *shall* be granted without modification or delay") (emphasis added). Notably, in adding new Section 3(c) to the NGA through enactment of EPAct 1992, Congress did not limit, restrict, except or otherwise condition the applicability of the new legal standard in any manner. Neither did Congress make ultimate consumption of the gas or LNG to be exported an express prerequisite for the applicability of the Section 3(c) standard of review.

a manner consistent with safeguarding the adequacy of North American natural gas supply as a whole.[247]

Third, there is no public interest benefit to be gained by departing from DOE/FE's established precedent of granting applications for the export of natural gas or LNG to Canada in accordance with Section 3(c) of the NGA.[248] The robust record developed by DOE/FE when

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[247] Significantly, Section 118 of the NEB Act requires the NEB to assess whether the quantity of natural gas proposed to be exported exceeds the surplus remaining in Canada, after allowance has been made for the reasonably foreseeable requirements of the Canadian market and having regard to gas discovery trends in Canada**.** NEB Act, R.S.C. 1985, c. N-7, s. 118 (Can.) (last amended 2012). In fulfilling that mandate, the NEB has stated it recognizes that "Canadian natural gas requirements are met within ***a North American integrated market***" and thus, the analysis must be conducted in that context. *See* Aurora Liquefied Natural Gas Ltd., NEB Letter Decision, File OF-EI-Gas-GL-A777-2013-01 01 (May 1, 2014) (emphasis added), *available at* https://docs.neb-one.gc.ca/ll-eng/llisapi.dll/fetch/2000/90466/94153/552726/2381180/2381500/2452793/Letter_Decision_-_Aurora_LNG_Ltd._-_A3W3R3.pdf?nodeid=2452698&vernum=-. This principle of supply availability woven into the regulatory fabric of the NEB is similarly the cornerstone of DOE/FE's public interest analysis for LNG exports from U.S. projects to non-FTA nations. For example, DOE/FE has consistently relied on Delegation Order No. 0204-111, that albeit is no longer in effect, which calls for consideration of the domestic need for the natural gas proposed to be exported.

[248] DOE/FE consistently has authorized applications for the export of natural gas and LNG to Canada under Section 3(c) of the NGA. *See, e.g.*, *Puget Sound Energy Inc., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 3540, FE Docket No. 14-123-NG (Oct. 30, 2014); *J.P. Morgan Commodities Canada Corp., Order Granting Long-Term Authorization to Export Natural Gas to Canada*, DOE/FE Order No. 3246, FE Docket No. 12-151-NG (Feb. 27, 2013); *TransCanada Pipelines Ltd., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 3152, FE Docket No. 12-92-NG (Oct. 4, 2012); *Puget Sound Energy Inc., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 3026, FE Docket No. 11-120-NG (Oct. 31, 2011); *TransCanada Pipelines Ltd., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 2707, FE Docket No. 09-95-NG (Oct. 7, 2009); *Central Hudson Gas & Electric Co., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 2439, FE Docket No. 07-98-NG (Oct. 31, 2007); *Consolidated Edison Co. of NY Inc., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 2282, FE Docket No. 06-53-NG (Oct. 27, 2006); *TransCanada Pipelines Ltd., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 2169, FE Docket No. 05-79-NG (Dec. 28, 2005); *Rumford Power Assocs. LP, Order Granting Long-Term Authorization to Export Natural Gas to Canada for Subsequent Re-Import*, DOE/FE Order No. 1434, FE Docket No. 98-83-NG (Nov. 9, 1998*); CoEnergy Trading Co., Order Granting Long-Term Authorization to Export Natural Gas to Canada for Subsequent Re-Import*, DOE/FE Order No. 1280, FE Docket No. 97-41-NG (June 20, 1997); *BC Gas Utility Ltd., Order Granting Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 1149, FE Docket No. 96-07-NG (Mar. 12, 1996); *National Steel Corp., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada, and Vacating Authorization*, DOE/FE Order No. 1104, FE Docket No. 95-58-NG (Oct. 25, 1995); *WestCoast Power Inc., Order Granting Long-Term Authorization to Import and Export Natural Gas from and to Canada*, DOE/FE Order No. 969, FE Docket No. 94-55-NG (Aug. 18, 1994); *TransCanada Pipelines Ltd. & Great Lakes Gas Transmission LP, Order Granting Authorization to Import and Export Natural Gas from and to Canada, and Vacating Previous Order*, DOE/FE Order No. 795, FE Docket No. 93-34-NG (Apr. 30, 1993); *Montana Power Co., Order Granting Long-Term Authorization Export Natural Gas to*

considering the cumulative impacts of LNG exports on domestic energy consumption, production, and prices, as well as the macroeconomic impact of such exports on the U.S. economy[249] establishes that LNG exports (or at least those within the studied levels) are consistent with the public interest.

In light of the overwhelming evidence that Bear Head LNG's proposed exports are consistent with the public interest, departing from established DOE/FE precedent to grant natural gas exports to Canada pursuant to Section 3(c) of the NGA "without modification or delay" would appear to serve no role in protecting or advancing the public interest of the United States. A review under Section 3(a) of the NGA would appear to be inconsistent with the public interest, as it would delay development of the Project and, in turn, delay realization of the numerous public interest benefits that will accrue to the United States by virtue of the Project.

For the foregoing reasons, it is Bear Head LNG's position that applications such as this one seeking authorization to export natural gas to Canada must be deemed consistent with the public interest and granted without modification or delay, regardless of the ultimate use to which the gas to be exported to Canada. Should DOE/FE find differently, Bear Head LNG respectfully requests that DOE/FE consider the public interest analysis provided in this Application and make a favorable public interest determination on an expedited basis pursuant to NGA Section 3(a).

Canada, and Terminating Existing Authorization, DOE/FE Order No. 759, FE Docket No. 92-130-NG (Dec. 22, 1992).

[249] *See* DOE/FE, *LNG Export Study – Related Documents*, *available at* http://energy.gov/fe/downloads/lng-export-study-related-documents. *See also 2014 Increased Export Study*, *supra* note 106.

XI.
REQUEST FOR EXPEDITED REVIEW

To the extent DOE/FE deems it necessary to conduct a public interest analysis in accordance with the standard of review found in Section 3(a) of the NGA for the LNG Non-FTA Authorization, Bear Head LNG respectfully requests that DOE/FE issue an order granting such authorization on an expedited basis by no later than June 30, 2015. Consistent with obtaining authorization by June 30, 2015, Bear Head LNG respectfully requests that DOE/FE establish a shortened notice period and provide that protests, motions to intervene and comments be filed within thirty business days from the date the notice is issued. Bear Head LNG further requests any and all other authorizations or waivers DOE/FE may deem necessary to grant Bear Head LNG the LNG Non-FTA Authorization within the timeframe requested.

Bear Head LNG submits that good cause exists for the shortened notice period and expedited action requested here, and that such actions are in the public interest. As the Project does not involve any construction activities in the United States, no environmental impacts will result from DOE/FE's action on this Application. To the extent modification or expansion of existing U.S. pipeline infrastructure become necessary in the future to transport feed gas to the U.S.-Canada border for subsequent delivery to the Project, the environmental impacts associated with any related construction will be rightfully considered by FERC.

Furthermore, the ample record developed by DOE/FE in considering LNG exports from the United States in recent years,[250] which is bolstered by the significant evidence submitted with

[250] *See* DOE, 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 (Notice of Availability of the LNG Export Study); DOE/FE, *LNG Export Study – Related Documents*, (NERA Economic Consulting Analysis (Study - Part 2)), *available at* http://energy.gov/fe/downloads/lng-export-study-related-documents; *See* DOE/FE, Nat'l Energy Tech. Lab., *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States* (May 29, 2014), *available at* http://www.energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf; *see also* DOE/FE, Nat'l Energy Tech. Lab., *Life Cycle Analysis of Natural Gas Extraction and Power*

this Application, establishes that Bear Head LNG's proposed exports are consistent with the public interest.

For the foregoing reasons, Bear Head LNG respectfully submits that no stakeholder is prejudiced by expedited review and a shortened notice period for the instant Application.

Moreover, expedited consideration of this Application is warranted. Last year, DOE/FE changed its procedures regarding the order in which applications for non-FTA authorization are reviewed.[251] In making this change, DOE/FE highlighted several goals. In particular, DOE/FE stressed the importance of ensuring that the most commercially advanced projects proceed first. In its Federal Register Notice announcing the new procedures, DOE/FE stated that the shift was enacted to "ensure prompt action" on projects that are "otherwise ready to proceed" and to prevent delays from projects with "little prospect of proceeding."[252] Additionally, in discussing the proposed changes in his testimony before the Senate, current Assistant Secretary for Fossil Energy Christopher Smith ("A.S. Smith") noted that the revised procedures will "prioritize resources on the more commercially advanced projects."[253]

In making the change, DOE/FE stressed the importance of having the most information possible to make their public interest determination. DOE noted that completion of the necessary

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Generation (May 29, 2014), *available at* http://www.netl.doe.gov/File%20Library/Research/Energy%20Analysis/Life%20Cycle%20Analysis/NETL-NG-Power-LCA-29May2014.pdf; Addendum To Environmental Review Documents Concerning Exports Of Natural Gas From The United States (Aug. 2014), *available at* http://energy.gov/sites/prod/files/2014/08/f18/Addendum.pdf; EIA, *Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets* (Oct. 29, 2014), *available at* http://www.eia.gov/analysis/requests/fe/.

251 Procedures for Liquefied Natural Gas Export Decisions, 79 Fed. Reg. 48,132 (Aug. 15, 2014).

252 *Id*.

253 *How to Harness a Game-Changing Resource for Export, Domestic Consumption, and Transportation Fuel Hearing Before S. Comm. On Energy and Natural Resources*, 113 Cong. 6 (2014) (Statement of Christopher Smith, Principal Deputy Asst. Sec. DOE/FE) [hereinafter *Chris Smith 6/19 Senate Testimony*].

environmental review component helps to improve the quality of information on which DOE/FE bases its decisions.[254]

Indeed, the expedited timeline for review is consistent with recent statements by DOE/FE regarding their desire to approve projects quickly and efficiently. In discussing a recent Senate proposal requiring DOE/FE to fast-track LNG exports, A.S. Smith stated that not only could DOE/FE comply with a required 45 day review period following the completion of the required NEPA review,[255] but that it was unnecessary given that the recent procedural changes already reflect DOE/FE's commitment to expedite review of such applications.[256]

As previously stated, the Bear Head Project is a previously permitted project that only requires minor modifications to existing authorizations, many of which it has already received. As a part of this process, the Project has undergone environmental review in Canada, and no construction or modification of any U.S. facilities requiring environmental review is requested. The Project is also currently a brownfield site, where preliminary construction has already occurred, and significant progress in engineering and development has already been made. In light of these facts, and the commercially advanced status of the Project, issuance of the Non-FTA Authorization requested herein by June of 2015 is consistent with the clearly stated policies and priorities of DOE/FE.

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254 Procedures for Liquefied Natural Gas Export Decisions, 79 Fed. Reg. 48, 132 (August 15, 2014); *see also Chris Smith 6/19 Senate Testimony*, *supra* note 253, at 6 ("By considering for approval those projects that are more likely to actually be constructed, DOE will be able to base its decision on a more accurate evaluation of the project's impact on the public interest.").

255 Timothy Cama, *Obama Administration 'Can Comply' with Natural Gas Export Bill*, The Hill (Jan. 29, 2015) http://thehill.com/policy/energy-environment/231145-obama-administration-can-comply-with-natural-gas-export-bill.

256 During discussions on the change A. S. Smith stated "DOE has been – and remains – committed to conducting a public interest determination process as required by the Natural Gas Act that is ***expeditious***, judicious, and fair." *See Chris Smith 6/19 Senate Testimony*, *supra* note 253, at 5 (emphasis added).

XII.
APPENDICES

The following appendices are attached hereto and incorporated by reference herein:

Appendix A: Opinions of Counsel

Appendix B: Black & Veatch, U.S. Market Impact Assessment for LNG Exports at the Bear Head Export Project (February 2015)

Appendix C: Black & Veatch, New England Market Impact Assessment for LNG Exports at the Bear Head Export Project (February 2015)

Appendix D: Ziff Energy, Long-Term Natural Gas Supply and Demand Forecast to 2050 for Bear Head LNG (November 2014)

Appendix E: The Perryman Group, Economic and Fiscal Benefits of the Proposed Bear Head LNG Project in Nova Scotia: An Analysis with Emphasis on the Effects on the United States (January 2015)

Appendix F: SNC-Lavalin, Summary of Environmental Legislation, Permitting and Engineering Codes, Standards and Specifications (February 2015)

Appendix G: FILED AS PRIVILEGED AND CONFIDENTIAL
SNC-Lavalin, Anticipated Maritimes & Northeast Pipeline System Modification/Expansion Requirements (February 2015)

XIII.
REPORT CONTACT

The report contact is as follows:

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XIV.
CONCLUSION

For the foregoing reasons, Bear Head LNG respectfully requests that DOE/FE issue an order granting the requested authorizations in accordance with the standard of review found in Section 3(c) of the NGA by no later than April 30, 2015. However, if DOE/FE deems it necessary to conduct a full public interest analysis in accordance with the standard of review set forth in Section 3(a) of the NGA for the Non-FTA Authorization sought herein, then Bear Head LNG requests issuance of an order granting such authorization on an expedited basis by June 30, 2015; and an order granting the NG Authorization and the LNG FTA Authorization consistent with Bear Head LNG's original request of authorizations by April 30, 2015. Bear Head LNG requests each of these authorizations, for a 25-year term commencing on the earlier of the date of first export or 10 years from the date the requested authorization is granted.

Moreover, Bear Head LNG requests these authorizations to export natural gas and LNG on its own behalf and as agent for third parties.

Respectfully Submitted,

/s/ Tania S. Perez
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Attorneys for
Bear Head LNG Corporation
& Bear Head LNG (USA), LLC

Dated: February 25, 2015

VERIFICATION

State of Texas)

County of Harris)

BEFORE ME, the undersigned authority, on this day personally appeared John Godbold, who, having been by me first duly sworn, on oath says that he is the Project Director for Bear Head LNG Corporation and is duly authorized to make this Verification; 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.

John Godbold

SWORN TO AND SUBSCRIBED before me on the 25th day of February, 2015.

Name: Kathryn Leanne Ross Ebow
Title: Notary Public, State of Texas

My Commission Expires: September 12, 2018.

KATHRYN LEANNE ROSS EBOW
Notary Public, State of Texas
My Commission Expires
September 12, 2018