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

COMMENTS OF GOLDEN PASS PRODUCTS LLC REGARDING THE 2015 LNG EXPORT STUDY

Pursuant to the "Notice Of Availability Of The 2014 EIA LNG Export Study And The 2015 LNG Export Study, And Request For Comments" issued by the Office of Fossil Energy, Department of Energy ("DOE/FE") and published in the *Federal Register*, Golden Pass Products LLC ("GPP") submits the following Comments regarding the 2015 LNG Export Study commissioned by DOE/FE to evaluate the cumulative macroeconomic impact of levels of U.S. LNG exports sourced from the lower-48 states in volumes ranging from 12 to 20 billion cubic feet per day (Bcf/d). The joint study by the Center for Energy Studies at Rice University's Baker Institute and Oxford Economics (2015 LNG Export Study) assessed the macroeconomic impact of LNG exports on the U.S. economy using global multi-stage modeling with an emphasis on the energy sector and natural gas in particular.

Golden Pass Products has applied for authority to export natural gas to countries with which the U.S. has not entered into a free trade agreement for trade in natural gas (FE Docket No. 12-156-LNG). GPP requests that these comments also be considered in the pending proceedings for its NFTA export authorization.

¹ Federal Register, Notice from Office of Fossil Energy (FE) of the Department of Energy (DOE), December 29, 2015.

² The Macroeconomic Impact of Increasing U.S. LNG Exports, Center for Energy Studies at Rice University's Baker Institute and Oxford Economics, October 29, 2015.

³ GPP has filed an application before DOE/FE for authorization to export 740 billion cubic feet ("Bcf") of domestically produced gas as LNG, equal to 15.6 million metric tons per annum ("MTPA"), to non-Free Trade Agreement nations ("NFTAs"), for a term of 25 years commencing at the earlier of the date of first export (following the construction of the necessary facilities) or seven years from issuance of the authorization. GPP's application is pending in FE Docket No. 12-156-LNG. Notice of GPP's application was published in the *Federal Register* on December 6, 2012. On September 27, 2012, the DOE/FE authorized GPP to export 740 Bcf annually to countries that have a entered into Free Trade Agreement ("FTA") requiring the national treatment for trade in natural gas *Golden Pass Products LLC*, FE Docket No. 12-88-LNG, Order No. 3147. GPP's NFTA application includes economic studies that GPP commissioned to examine both the price and macroeconomic impacts of its proposed project. On July 7, 2014, GPP and Golden Pass Pipeline LLC filed applications with the Federal Energy Regulatory Commission ("FERC") under Sections 3 and 7 of the Natural Gas Act, 15 U.S.C. §§ 717b and 717f, to construct and operate facilities to enable the LNG exports for which GPP seeks DOE authorization. Those applications are pending before the FERC.

Summary

GPP agrees with the 2015 LNG Export Study conclusion that LNG exports will be a net benefit to the U.S. The 2015 LNG Export Study conclusion is consistent with the extensive catalog of studies examining the economic impacts of LNG exports, including the economic study findings presented in GPP's pending NFTA export application. Furthermore, it is noteworthy that in every case tested, including up to 28 Bcf/d of volume, LNG exports delivered net positive economic benefits to the U.S.

The 2015 LNG Export Study, which builds on the prior NERA study of 2012,⁴ is sufficiently thorough and comprehensive to support DOE approval of the pending LNG NFTA export applications, including the pending GPP NFTA application. The study's conclusions of net positive macroeconomic effects once again demonstrate that LNG exports are in the public interest. Additional foreseeable benefits from increased natural gas liquids (NGLs) production, though not addressed in the study, can further contribute to the opportunity for jobs and economic growth. At a time of intense competition from global LNG rivals, it is imperative that U.S. projects be in a position to compete for market opportunities. As such, the DOE should expedite its reviews and final determinations for the pending NFTA export applications.

Discussion

Major Benefits from LNG Exports

The 2015 LNG Export Study's conclusion that LNG exports are of net benefit to the U.S. demonstrates that exporting LNG is in the public interest. This is not surprising, given the magnitude of economic activity stimulated by such capital-intensive, long-term projects. Moreover, the conclusions build upon the primary conclusion of the previous NERA study, that net benefits increase as LNG export volumes increase. The NERA study and its subsequent extension to higher volume scenarios, ⁵ as well as work performed by other prominent economic experts including Brookings Institution, ⁶ identified significant net benefits to the nation across a broad range of scenarios and assumptions.

The study conclusion is also consistent with the findings of studies commissioned for GPP, wherein a proposed investment of \$10 billion in the export project was seen to drive significant economic gains nationally on the order of \$31 billion in gross product. The economic and jobs gains begin early with the construction phase of the project, yet also stimulate lasting employment and economic activity during the extended operating life of the facilities.

Even beyond the scope of the study, there is significant additional potential for economic gains arising from incremental natural gas liquids produced along with the gas for export. NGLs, such as ethane, propane, and butane, are used by the manufacturing industry to produce

⁴ Macroeconomic Impacts of LNG Exports from the United States, NERA Economic Consulting, December 3, 2012.

⁵ Updated Macroeconomic Impacts of LNG Exports from the United States, NERA Economic Consulting, February 20, 2014.

⁶ Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas, The Brookings Institution, May 2, 2012.

petrochemicals. This value could be a substantial boost for the chemicals industry. NGL production will not only help renew support for America's manufacturing sector, but also lower costs to consumers. In GPP's application, a third-party macroeconomic study estimated that about an average incremental 75,000 barrels per day of NGLs would be produced if 6 Bcf/d of domestically produced gas were exported as LNG. The much higher rates of potential exports assessed in the 2015 LNG Export Study would, in turn, create even greater NGL benefits.

Ample Supply to Meet Demand

Supply and demand fundamentals are keys to understanding the potential impacts of LNG exports on the U.S. domestic natural gas market. Over the past decade, estimates of U.S. natural gas supply have dramatically increased as a result of new technologies. The U.S. now has an abundance of cost-effective gas, enough to supply growing domestic demand including new manufacturing, as well as LNG exports. Today, this rapid transformation of supply continues along with continued upstream developments. Indeed, EIA estimates of U.S. gas resources continued to grow over a recent five year period by about 37%, further strengthening the understanding that the U.S. has enough supply to meet domestic needs and allow for exports. The U.S. industry is capable of bringing on cost-comparable production to meet demand for LNG exports. Clearly, the supply outlook indicates an abundance of cost-effective gas underpinning domestic market security of supply, and lasting competitive advantages for U.S.-based industries, including LNG exports.

Real Benefits for the Environment

In addition to the macroeconomic benefits addressed in the study, U.S. LNG exports can deliver environmental advantages in the form of cost-effective options to reduce emissions globally. Natural gas is the cleanest burning fossil fuel and is being used throughout the world to reduce carbon dioxide emissions. U.S. LNG exports will displace more carbon intensive fuels in many destination markets, leading to more widespread adoption of cleaner fuel technologies and bringing lasting benefits to the environment. Indeed, the recently released report "LNG and Coal Life Cycle Assessment of Greenhouse Gas Emissions" compared full-cycle LNG emissions with those of coal under a range of scenarios¹¹. The study concluded that LNG can reduce GHG emissions by about half or more when replacing coal as a generation fuel in destination markets.

⁷ FE Docket 12-156 -LNG: Golden Pass Products LLC NFTA Application, Exhibit C: Deloitte Market Point: Economic Impact of LNG Exports from the United States, p. 20.

⁸ Golden Pass LLC NFTA Application (FE Docket 12-156- LNG), p18.

⁹One of the sponsors of Golden Pass Products, ExxonMobil, is building a world-class petrochemical expansion at its Baytown, Texas complex. The ethane and premium product facilities capitalize on abundant supplies of U.S. natural gas for feedstock to produce everyday consumer and industrial products such as packaging to wrap, seal and protect consumer goods. This clearly illustrates the opportunity for both domestic use and export of abundant U.S. natural gas.

¹⁰ EIA Estimated Lower 48 dry gas proved reserves have increased from 263,408 as of December 31, 2009 to 361,959 Tcf as of December 31. 2014. See, http://www.eia.gov/dnav/ng/ng_enr_dry_a_EPG0_r11_bcf_a.htm

¹¹ PACE Global study commissioned by the Center for Liquefied Natural Gas, October 2015.

As a clean fuel, natural gas can also help clean the air by reducing concentrations of other pollutants including sulfur dioxide and particulates, directly addressing serious challenges to health, the environment and the quality of life in many parts of the world.

Furtherance of Trade and Strategic Objectives

LNG exports represent an important catalyst for expanding exports, a national objective promoted by President Obama. U.S. LNG is a truly American product. Indeed, LNG exports will create productivity across a broad section of the U.S. economy, leveraging American gas supplies, equipment, technology and skilled labor to deliver billions of dollars annually in positive overseas trade. Furthermore, increased exports can foster energy security and stability for U.S. allies. Numerous key allies and trade partners have already signaled their strong interest in gaining access to U.S. natural gas supplies as a way of diversifying energy supplies, and strengthening their economies.

DOE Basis for Action Reaffirmed

Section 3(a) of the Natural Gas Act, ¹² which applies to GPP's proposed export of LNG to NFTA nations, establishes a rebuttable presumption that such exportation of natural gas is in the public interest. Accordingly, Section 3(a) requires the DOE Office of Fossil Energy (DOE/FE) to approve the export of LNG to an NFTA nation unless it finds the export inconsistent with the public interest after opportunity for public hearing, i.e., an interested party has overcome the Section 3(a) presumption that such exportation is in the public interest and demonstrated how public interest is harmed. ¹³ DOE/FE has stated that their review of proposed LNG export projects has focused on: (1) the domestic need for the gas to be exported, (2) the potential threat to domestic supply security, (3) consistency with DOE/FE policy promoting market competition, and (4) any other factors bearing on the public interest. ¹⁴ DOE/FE also considers (1) economic

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

15 U.S.C. § 717b(a)(emphasis added). Thus, while the Baker/Oxford Study states (at p. 19) that "the U.S. DOE is required to assess whether or not exports to non-FTA countries is [sic] in the public interest," NGA Section 3(a) requires DOE to presume the export is in the public interest unless an opponent overcomes the statutory presumption.

¹² Section 3(a) provides as follows:

¹³ See, e.g., Cameron LNG, LLC, DOE/FE Order No. 3391 (2014) at 6, Final Opinion and Order No. 3391-A (2014); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2691 (2011), at 28, Final Opinion and Order, DOE/FE Order No. 2961-A (2012) at 8.

¹⁴ See, e.g., Cameron LNG, Order No. 3391-A, at 9-10; Freeport LNG Expansion, Order No. 3282-C, at 9-10 (referencing former DOE Delegation Order No. 0204-111).

impacts, (2) international impacts, (3) security of natural gas supply, and (4) environmental impacts. ¹⁵

The 2015 LNG Export Study adds to the body of compelling evidence that LNG exports benefit the nation. To date, no credible argument has been made to demonstrate that LNG exports are inconsistent with the public interest. Accordingly, per the requirements of the Natural Gas Act, DOE must continue to issue timely LNG NFTA export authorizations. American jobs and economic opportunity depend on it.

Respectfully submitted,

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Dated: February 11, 2016

¹⁵ Cameron LNG, Order No. 3391-A, at 8; Freeport LNG Expansion, L.P., DOE/FE Order No. 3282-C, Final Opinion and Order (2014) at 9.