ORIGINAL

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



In the Matter of: FREEPORT LNG EXPANSION, L.P. FLNG LIQUEFACTION, LLC Docket No. 11-161 LNG

MOTION FOR LEAVE TO ANSWER AND ANSWER OF FREEPORT LNG EXPANSION, L.P. AND FLNG LIQUEFACTION, LLC TO MOTION TO INTERVENE AND PROTEST OF SIERRA CLUB

Communications with respect to this Application should be addressed to:

Les E. Lo Baugh, Esq. Brownstein Hyatt Farber Schreck, LLP 2029 Century Park East, Suite 2100 Los Angeles, CA 90067 (310) 500-4638 (tel) (310) 500-4602 (fax) John B. Tobola
Vice President & General Counsel
Freeport LNG Expansion, L.P.
333 Clay St., Suite 5050
Houston, Texas 77002
Tel (713) 333-4241
Fax (713) 980-2903
jtobola@freeportlng.com

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

In the Matter of: FREEPORT LNG EXPANSION, L.P. FLNG LIQUEFACTION, LLC Docket No. 11-161 LNG

MOTION FOR LEAVE TO ANSWER AND ANSWER OF FREEPORT LNG EXPANSION, L.P. AND FLNG LIQUEFACTION, LLC TO MOTION TO INTERVENE AND PROTEST OF SIERRA CLUB

Pursuant the Department of Energy's ("DOE") regulations,¹ Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC (collectively, "FLEX") hereby submit this Answer to the Sierra Club's Motion to Intervene, Protest, and Comments² ("Protest") filed on April 13, 2012 in the above-captioned proceeding. In its Protest, Sierra Club erroneously contends that FLEX's application for authorization to export LNG ("FLEX Application") should be denied because the proposed LNG exports are not in the public interest, and because the FLEX Application is not supported by adequate environmental and economic analysis. As explained below, Sierra Club's Protest fails to overcome the presumption that FLEX's proposed LNG exports are in the public interest and that the FLEX Application should be approved.

^{1 10} C.F.R. § 590.303(e) and 590.304(f) (2010).

² In the Matter of Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC, FE Docket No. 11-161-LNG, Sierra Club's Motion to Intervene, Protest, and Comments (April 13, 2012).

I. PROCEDURAL BACKGROUND

On December 19, 2011, FLEX filed the FLEX Application with the Department of Energy's ("DOE") Office of Fossil Energy ("FE"), for a long-term, multi-contract authorization to export 1.4 billion cubic feet (Bcf) per day, or 511 Bcf per year,³ of liquefied natural gas ("LNG") over 25 years from Quintana Island near Freeport, Texas to any country with which the United States does not have a free trade agreement ("FTA") requiring national treatment for trade in natural gas and LNG, which has or in the future develops the capacity to import LNG via ocean-going carrier, and with which trade is not prohibited by U.S. law or policy. The FLEX Application was submitted pursuant to Section 3 of the Natural Gas Act ("NGA"),⁴ Part 590 of the Regulations of the DOE,⁵ and Section 201 of the Energy Policy Act of 1992.⁶

Notice of the FLEX Application was published in the Federal Register on February 13, 2012 and provided, among other things, that comments, protests, motions to intervene, and requests for additional procedures be filed with DOE/FE no later than April 13, 2012. Sierra Club submitted its Protest on the final day of the comment period.

II. ANSWER TO PROTEST

In its Protest, Sierra Club erroneously asserts that FLEX's proposed LNG exports will have significant economic and environmental harms, and that the FLEX Application cannot be approved by DOE/FE without a complete National Environmental Policy Act ("NEPA") analysis, including a full Environmental Impact Statement ("EIS"). For the reasons discussed

^{4 15} U.S.C. § 717b (2010).

⁵ 10 C.F.R. § 590 (2010).

⁶ Pub. L. No. 102-486, § 201, 106 Stat. 2776. 2866 (1992) (codified as amended at 15 U.S.C. § 717b(c) (2010)).

below, Sierra Club's Protest fails to overcome the statutory presumption in favor of granting the FLEX Application, and it should be granted no weight by DOE/FE in its deliberations.

A. Sierra Club Fails to State a Claim of Interest in the FLEX Application

Because it seeks to intervene as a party, Sierra Club must state clearly and concisely the facts on which its claim of interest is based. Sierra Club has provided a list of "economic, aesthetic, spiritual, personal, and professional" interests in the FLEX Application, which broadly amount to any environmental and economic consequences of domestic natural gas production and the exportation of LNG.

Sierra Club's stated concerns are not specific to the FLEX Application, but raise general policy issues associated with regulation of the domestic natural gas market and all uses of natural gas, whether for LNG exports, power plants, chemical or plastic manufacturing, or other commercial, industrial or even residential uses. The interests asserted by Sierra Club are those of any person or entity opposed to domestic natural gas production, and do not amount to a specific claim of interest in the FLEX Application sufficient to support its intervention as a party. Accordingly, its motion to intervene should be denied.

B. <u>DOE/FE May Approve the FLEX Application Conditional Upon Environmental</u> Review by FERC Pursuant to NEPA

DOE/FE has consistently ruled that Section 3 of the Natural Gas Act⁹ creates a rebuttable presumption that proposed exports of natural gas are in the public interest. In evaluating whether

⁷ 10 C.F.R. § 590.303(b).

⁸ Sierra Club Protest, at 2-3.

⁹ 15 U.S.C. §717b. This authority is delegated to the Assistant Secretary for FE pursuant to Redelegation Order No. 00.002.04D (November 6, 2007)

the proposed export is within the public interest, DOE/FE considers several factors including the domestic need for the gas and the security of domestic natural gas supplies. In addition, job creation, the effect on U.S. balance of payments, the generation of tax revenue and other appropriate factors are considered, including whether the arrangement is consistent with DOE/FE's policy of promoting competition in the marketplace by allowing commercial parties to freely negotiate their own trade arrangements.¹⁰

Environmental impacts are among the other factors that DOE/FE may consider in its public interest analysis of the FLEX Application. For this reason, the FLEX Application contains a discussion of the environmental benefits to be gained from using natural gas as a substitute for coal or petroleum products. As the Sierra Club is well aware, the climate change benefits from the use of natural gas, rather than coal or fuel oil, are not dependent upon the geographic location of the usage since greenhouse gas emissions and climate change impacts are global. Because DOE/FE cannot issue a final approval until the procedural requirements of NEPA have been satisfied, FLEX specifically requested authorization of the proposed LNG exports conditional upon NEPA review by the Federal Energy Regulatory Commission ("FERC"). Sierra Club argues that DOE/FE may not grant a conditional or full approval of the

¹⁰ Sabine Pass Liquefaction LLC, FE Docket No. 10-111-LNG, Opinion and Order Conditionally Granting Long-Term Authorization to Export Liquefied Natural Gas from Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations, Order No. 2961 at p. 29 (May 20, 2011). The free trade principle is in accord with DOE/FE's Policy Guidelines, which promote free and open trade by minimizing federal control and involvement in energy markets. Policy Guidelines and Delegation Orders Relating to the Regulation of Imported Natural Gas, 49 Fed. Reg. 6,684 (Feb. 22, 1984).

¹¹ 10 C.F.R. § 590.402 (2010) ("The Assistant Secretary may issue a conditional order at any time during a proceeding prior to issuance of a final opinion and order. The conditional order shall include the basis for not issuing

FLEX Application "without the completion of a full and legal EIS" and supporting Record of Decision. 12 However, such conditional authorizations are routinely issued by DOE/FE, which may conduct its public interest analysis concurrent with FERC's review of environmental impacts under NEPA. 13

As explained in the FLEX Application, FLEX is currently completing the mandatory NEPA pre-filing review process for the natural gas liquefaction facilities related to the FLEX Application (the "Liquefaction Project"). FLEX anticipates filing a formal application with FERC before the end of 2012 requesting that FERC issue an Order authorizing the siting, construction and operation of the Liquefaction Project. FERC will be the lead agency for environmental review under NEPA, and DOE/FE will act as a cooperating agency.

This is precisely the process authorized by the Energy Policy Act of 2005,¹⁴ which amended the NGA to coordinate the process of complying with NEPA by designating FERC as the lead agency.¹⁵ The Act also required FERC to establish the NEPA pre-filing process mentioned above, set the schedule and deadlines for all cooperating agencies, and maintain a complete consolidated record of all decisions made or actions taken by any Federal or State agency regarding any Federal authorization.¹⁶

a final opinion and order at that time and a statement of findings and conclusions. The findings and conclusions shall be based solely on the official record of the proceeding.")

¹² Sierra Club Protest, at 53.

¹³ See Sabine Pass Liquefaction LLC Order No. 2961, supra note 10, at 43. See also Rochester Gas and Electric Corp., FE Docket No. 90-05-NG, Order No. 503 (May 16, 1991).

¹⁴ Energy Policy Bill of 2005, Pub. L. 109-58, H.R. 6, 109th Cong. (2005).

^{15 15} U.S.C. § 717n(b).

¹⁶ 15 U.S.C. § 717b-1(a), 717n(b)-(d).

DOE/FE has adopted regulations for implementing NEPA, as published by the Council on Environmental Quality, that govern its role as a cooperating agency. ¹⁷ For DOE/FE actions involving another Federal agency, such as FERC, in a related decision subject to NEPA, like the siting and construction of the Liquefaction Project, DOE/FE cooperates with the lead agency to develop environmental information and to determine whether an EIS must be prepared. ¹⁸ As a cooperating agency, DOE/FE may adopt the EIS or Environmental Assessment ("EA") prepared by FERC without recirculation if, after independent review of the document, DOE/FE concludes that its comment and suggestions have been satisfied. ¹⁹

The separate roles of lead and cooperating agencies are well-established. In *Henry v. Federal Power Commission*, 513 F.2d 395 (U.S.App.D.C. 1975), a natural gas pipeline company had filed applications with the Federal Power Commission ("Commission") for authorization under the NGA to construct and operate certain coal gas facilities. The court explained that the Commission's duty under NEPA to evaluate the proposed project's environmental impacts did not extend to preparing a full EIS, because it could rely on the one prepared by the lead agency.²⁰ The Commission could discharge its duty by accepting, rejecting, or modifying the analysis of the lead agency.²¹ Later decisions have reaffirmed that cooperating agencies need not duplicate

¹⁷ 10 C.F.R. § 1021.103.

^{18 10} C.F.R. § 1021.342.

¹⁹ 40 C.F.R. § 1506.3(c); *see also* Council on Environmental Quality Guidance Regarding NEPA Regulations, 48 Fed. Reg. 34263, 34265-34266 (stating that regulations regarding adoption of an EIS also apply to an EA).

²⁰ Henry v. Federal Power Commission, 513 F.2d 395,407 (U.S.App.D.C. 1975).

²¹ Id.

the lead agency's work of preparing an EIS or EA.²² If DOE/FE has any concerns, it may file comments with FERC during the environmental review process.

In accordance with its shotgun approach seeking to create potential regulatory hurdles to the FLEX Application, Sierra Club also argues that DOE/FE must conduct a comprehensive review of impacts under both the Endangered Species Act (including preparing a biological assessment) and the National Historic Preservation Act (to identify properties in any area affected by natural gas development). As with the independent NEPA analysis discussed above, DOE/FE has no jurisdiction over wellfield drilling activity, especially not as part of its review of the FLEX Application under Section 3 of the NGA. It is therefore irrelevant and should be given no weight.

C. Sierra Club Fails to Show that FLEX's Proposed LNG Exports are Inconsistent with the Public Interest

The FLEX Application was buttressed by substantial evidence supporting the presumption that its proposed exports are in the public interest, including minimal impacts on U.S. natural gas prices and significant benefits to the local, regional, and national economy, the national balance of trade, American energy security, and the global environment. The FLEX Application relied in part on the recently published Deloitte MarketPoint LLC report assessing the potential domestic economic impacts of LNG exports (the "Deloitte Report"), which concluded that "the magnitude of domestic price increase that results from export of natural gas

²² See LaFlamme v. FERC, 945 F.2d 1124, 1130 (holding that where FERC was the lead agency, "it was not unreasonable for the Forest Service as a cooperating agency to decline to prepare independently an EA or EIS"); Sierra Club v. U.S. Army Corps of Engineers, 295 F.3d 1209, 1215 ("Agencies are not required to duplicate the work done by another federal agency which also has jurisdiction over a project. NEPA regulations encourage agencies to coordinate on such efforts").

in the form of LNG is likely quite small."²³ Sierra Club's Protest fails to rebut either the evidence presented in the FLEX Application or the presumption that the FLEX Application is in the public interest.

1. <u>DOE/FE's Public Interest Determination Does Not Require Comprehensive</u> Environmental Review of Upstream Natural Gas Production

Sierra Club does acknowledge that DOE/FE's public interest inquiry is rooted in the NGA's fundamental purpose of assuring the public a reliable supply of gas at reasonable prices. However, Sierra Club's Protest also argues that DOE/FE can only make a public interest determination after a comprehensive analysis of environmental impacts, including those both highly speculative and those not connected to the specific FLEX Application at issue.

In support of this interpretation of the NGA, Sierra Club cites the expansive "exploration of all issues relevant to the 'public interest'" recommended in *Udall v. Federal Power Commission*, 387 U.S. 428, 450, and later cited in a discussion of the public interest under the NGA in *Northern Natural Gas Company v. Federal Power Commission*, 399 F.2d 953, 973 (1968). The project at issue in *Northern Natural Gas*, however, was the construction and operation of a gas pipeline authorized by the Commission (predecessor to FERC) under Section 7 of the NGA – not an authorization by DOE/FE to import or export natural gas under Section 3 of the NGA. These cases only serve to reinforce our argument above that the proper forum for Sierra Club's comments is FERC's environmental review process, whether conducted under

²³ Deloitte Center for Energy Solutions and Deloitte MarketPoint LLC, Made in America: The economic impact of LNG exports from the United States at 1 (2011) (hereinafter the "Deloitte Report"), available at http://www.deloitte.com/assets/Dcom-

UnitedStates/Local%20Assets/Documents/Energy_us_er/us_er_MadeinAmerica_LNGPaper_122011.pdf

Sections 3 or 7 of the NGA. Even in that context, however, the Sierra Club's elaborate parade of generalized environmental horribles simply lack a sufficient nexus to the FLEX Application to be given weight.

LNG exports will draw from the general supply of natural gas, not from any specific wells currently operating or to be brought into production during the 25 years of the exports, although that mix may well include natural gas from wells that are currently flaring natural gas. The proper time for an environmental review of a well is when that specific well or field production is seeking to be permitted. There is no way of anticipating which wells over the next 5 to 30 years may produce the natural gas that will flow through various pipelines and be used as feed gas by the FLEX Liquefaction Project. Unlike some other proposed LNG export projects, FLEX will not purchase natural gas from producers, but will simply offer LNG liquefaction and send-out facilities at its terminal to natural gas purchasers yet to be identified.

The broad universe of natural gas customers, whether the gas is intended for conversion of a coal plant to natural gas, the production of chemicals, the manufacture of plastics, providing heated water and heat for hospitals or schools, to power automobiles, to warm the office buildings where the Sierra Clubs operates, the various direct and indirect uses in the federal buildings where DOE and FERC reside or any of the other type of natural gas customers, all draw from general supplies of natural gas which in turn draw from general natural gas production. The Liquefaction Project is neither dependent upon nor tied to any particular currently existing natural gas well(s), whether shale or otherwise, or to any future such wells.

The Sierra Club's attack on natural gas production in general is an attack on the full range of uses for natural gas, including natural gas for electric power generation which displaces coal and fuel oil. These alleged concerns asserted by the Sierra Club are not specific to any particular

usage, including LNG exports, and are not specific to the FLEX project. Carried to its logical conclusion, such issues would relate to every new gas water heater, every new building that uses natural gas or electricity generated from natural gas, every hospital that sterilizes instruments with hot water heated by natural gas, every new industrial or chemical plant using natural gas, every school heated by natural gas, the sale of every product that uses natural gas directly or indirectly in its manufacture or distribution and every other use of natural gas whether direct or indirect.

FERC recently addressed similarly broad attacks in several Orders filed in the matter of Central New York Oil and Gas Company, LLC.²⁴ In its Order, FERC upheld the conclusion of its EA that "development of the Marcellus Shale and the potentially associated environmental impacts are not sufficiently causally-related to the [project] to warrant analysis."²⁵ There is no way to relate any specific gas production and gathering activities to the Liquefaction Project; even if there were, the potential impacts from such development are not "reasonably foreseeable" as defined under NEPA regulations.²⁶

FERC emphatically concluded in its *Central New York* Order that because the siting, permitting, construction and operation of shale gas wells fall within the regulatory jurisdiction of individual states, FERC need not consider in its EA the impact of these wells.²⁷ In doing so, FERC relied on *U.S. Department of Transportation v. Public Citizen*, 541 U.S. 752, 770 (2004), which held that 'where an agency has no ability to prevent a certain effect due to its limited

²⁴ Central New York Oil and Gas Company, LLC, FERC Docket No. CP10-480-001, 137 FERC ¶ 61,121 (2011), *reh'g*, 138 FERC ¶ 61,104 (2012).

²⁵ Id. at 3-4.

²⁶ Id. at 4, 15.

²⁷ Id. at 13.

statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect."

The same logic was applied in FERC's recent Order authorizing the siting, construction, and operation of the Sabine Pass LNG Terminal.²⁸ FERC explained that "impacts which may result from additional shale gas development are not "reasonably foreseeable" as defined by CEQ regulations," and the impact of such development is not "an 'effect' of the project."²⁹ Because the wells which produce the gas that might ultimately flow to the Sabine Pass terminal could be developed in any of the shale plays that exist in the eastern half of the U.S., it would be impractical for FERC to consider impacts associated with additional shale gas development as cumulative indirect impacts of the project.³⁰ The same principles apply to DOE/FE's review of the FLEX Application.

2. FLEX's Proposed LNG Exports Will Have a Minimal Effect on Gas Prices

Although the bulk of Sierra Club's Protest consists of comments on environmental impacts, the heart of DOE/FE's public interest analysis weighs the impact of the proposed LNG exports on the domestic natural gas market. Sierra Club claims that FLEX's proposed LNG exports will cause economic harm and eliminate domestic jobs, in support of which it cites a report prepared by Rep. Edward Markey's staff entitled "Drill Here, Sell There, Pay More" (the "Markey Report"). Rep. Markey has already unsuccessfully introduced legislation to prevent

²⁸ Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P., Docket No. Cp11-72-000, 139 FERC ¶ 61,039 at 32 (April 16, 2012).

²⁹ Id.

³⁰ Id. at 32-33.

³¹ Democratic Staff, House Natural Resources Committee, *Drill Here, Sell There, Pay More: The Painful Price of Exporting Natural Gas* (March 1, 2012).

the exportation of natural gas produced from public lands, and to prevent FERC approval of LNG export terminals before 2025. The Markey Report is a frankly partisan and ill-conceived document containing alarmist and misleading statements based on unrealistic assumptions about how quickly LNG export facilities could be brought online and worst-case scenarios for recoverable domestic shale gas reserves. It should be given no weight in DOE/FE's public interest analysis.

Although its interpretation is at best extreme, the "Markey Report" relies in part on a January 2012 report by the Energy Information Administration ("EIA") titled "Effect of Natural Gas Exports on Domestic Energy Markets" ("EIA Report"). The EIA Report bases its projections of potential price impacts on four different export-related demand scenarios:

- 6 Bcf/d phased in over 6 years (the low/slow scenario);
- 6 Bcf/d phased in over 2 years (the low/rapid scenario);
- 12 Bcf/d phased in over 12 years (the high/slow scenario); and
- 12 Bcf/d phased in over 4 years (the high/rapid scenario).

The EIA Report considers each of these scenarios in four different cases: the Annual Energy Outlook 2011 ("AEO2011") Reference Shale Estimated Ultimate Recovery ("EUR") case, the High Shale EUR case, the Low Shale EUR case, and the High Economic Growth case.

The EIA Report's rapid export scenarios are unrealistic. It takes years to design and construct an LNG export terminal, acquire necessary state and federal approvals, negotiate

³² The North America Natural Gas Security and Consumer Protection Act, H.R. 4024 (2012), and the Keep American Natural Gas Here Act, H.R. 4025 (2012). FERC recently approved the Sabine Pass LNG export terminal application in its Order at 139 FERC¶ 61,039 (April 16, 2012).

³³ EIA Office of Energy Analysis, Effect of Natural Gas Exports on Domestic Energy Markets as requested by the Office of Fossil Energy (January 2012) (hereinafter, "EIA Report").

multiple long-term supply contracts with potential buyers, and secure financing for such an expensive project. As explained in a recent report by the Brookings Institute's Energy Security Initiative ("Brookings Report), the EIA's low/rapid scenario assumes that four new LNG export terminals will be approved, built, and operating at capacity within two years. ³⁴ The EIA's even more dramatic high/rapid scenario assumes that the U.S. will, in the space of four years, grow from exporting negligible volumes to having roughly one-third of global LNG export capacity. ³⁵ Though various parties have filed applications for authorization to export LNG, it is unlikely that all or even most of this applied-for export authority will ever be realized because of the time, difficulty, and expense of actually commercializing, financing and constructing LNG liquefaction and export facilities, and the limitations in global market demand for LNG.

Sierra Club's suggestion that the U.S. would export large quantities of LNG in the Low Shale EUR case makes little sense, because it assumes not only that American companies will be exporting 12 Bcf/d within 4 years, but they will do so even if estimated recoverable supplies drop by 50%. This hypothesis does not reflect real-world conditions or even the EIA Report itself, which warns that its four export scenarios do not vary between High, Low, and Reference Shale EUR cases. The EIA Report clearly states that "[i]n reality, given available prices in export markets, lower or higher U.S. natural gas prices would tend to make any given volume of additional exports more or less likely." In other words, the high-volume export scenario is

³⁴ Brookings Institute Energy Security Initiative, *Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas* at 30 (May 2012).

³⁵ Id.

³⁶ EIA Report, supra note 32, at 9.

³⁷ EIA Report, supra note 32, at 4.

unlikely to happen if lower supplies and higher prices make the domestic market more attractive to natural gas producers.

Contrary to the impression Sierra Club seeks to convey, the EIA Report actually projects only moderate price effects for the AEO2011's Reference Shale EUR case, even under its improbably rapid export scenarios. Between 2015 and 2035, residential and commercial consumers are projected to spend only 3.2% more under the low/slow scenario of 6 Bcf/d phased in over 6 years, and 6.9-7.0% under the high/rapid scenario of 12 Bcf/d phased in over 4 years.³⁸ In the industrial sector, where low transmission and distribution charges mean that fluctuations in the natural gas commodity charge have a larger impact, expenditures during the same period are projected to range between 6.4% and 14.6%.³⁹ These are minimal to moderate price effects, especially given that the EIA Report projects natural gas domestic wellhead prices to rise 57% under the Reference Shale EUR case "even before considering the possibility of additional exports."⁴⁰

Even these moderate price impacts are overstated, because the EIA Report economic model assumes that investment by gas producers will lag behind new demand. As a result, the EIA's model predicts that prices will peak when export capacity is filled, then steadily taper off. Given the public application process and long lead time of several years required to construct an LNG liquefaction plant and ramp up operations, future exports will be fully anticipated by the market and producers, midstream players and consumers can act to mitigate the price effect. Unlike the EIA Report model, the Deloitte Report's model recognizes that there will be ample

 $^{^{38}}$ EIA Report, supra note 32, at 15, Table 1.

 $^{^{39}}$ EIA Report, supra note 32, at 15, Table 1.

⁴⁰ EIA Report, supra note 32, at 6.

notice of increased demand and assumes that producers will bring more supplies online, intermediaries will adjust flows, and consumers will react to price changes resulting from LNG exports. Production will increase with demand, exerting downward pressure on prices. As a result, any increase in prices would begin earlier and peak at a lower level than suggested by the EIA's model.

Additional context for the EIA Report is provided by the EIA's recently published Annual Energy Outlook 2012 Early Release Overview ("2012 Overview"). Like the EIA Report, the 2012 Overview calculates minimal price impacts even after assuming that the U.S. becomes a net exporter of LNG by 2016 and an overall exporter of natural gas by 2021. Law 2025 wellhead prices are projected to be \$5.23 per thousand cubic feet, which is \$0.24 lower than projected in the AEO2011. Though the 2012 Overview projects 2035 prices of \$6.52, this is only four cents higher than the previous year's AEO2011. The falling prices projected in the 2012 Overview support the presumption that approving the FLEX Application is in the public interest, and undermine Sierra Club's argument to the contrary.

a. The U.S. Has Ample Natural Gas Resources

The EIA's 2012 Overview Reference case estimates that the U.S. has 482 tcf of unproved technically recoverable shale gas, a reduction from the AEO2011 estimate of 827 tcf. Despite this reduction in estimated shale gas resources, the EIA actually projects long-term increases in natural gas production, mostly resulting from shale plays. Specifically, the 2012 Overview

⁴¹ Deloitte Report, supra note 23, at 2.

⁴² EIA, Annual Energy Outlook 2012 Early Release Overview (January 23, 2012) (hereinafter "2012 Overview").

⁴³ 2012 Overview, supra note 42, at 9.

⁴⁴ 2012 Overview, supra note 42, at 13, Table 1.

⁴⁵ 2012 Overview, supra note 42, at 9.

projects 7% *more* cumulative natural gas production from 2010 to 2035 than estimated in the AEO2011, primarily resulting from increased shale production -- even though the overall estimated resource base has been revised downward.⁴⁶

The overall decline in estimated unproved technically recoverable natural gas resources largely reflects a decrease in the estimate for the Marcellus shale. ⁴⁷ As explained in the FLEX Application, FLEX's proposed exports will be produced primarily from the Eagle Ford shale in South Texas, not the Marcellus. Any wellhead price impact from FLEX's proposed exports will be distributed primarily within the large and highly liquid Texas and Gulf Coast regional gas market, with minimal effects in other markets such as the Northeast.

b. <u>LNG Exports Will Not Harm Domestic Power Generation or Industrial</u> <u>Manufacturing</u>

As discussed in the EIA Report, domestic natural gas markets will balance future LNG exports largely through increased natural gas production, mostly from shale plays. The remainder will be supplied by natural gas that would have otherwise been consumed by the power-generating sector and the industrial sector or would otherwise be flared. Sierra Club argues that the modest price impacts of LNG exports will cause some power generators to switch from gas to coal, as well as harm domestic industries dependent on natural gas. It is doubtful even members of the coal industry consider that to be a possibility. Furthermore, this argument seems disingenuous in like of the Sierra Club's broad attach on natural gas in general.

⁴⁶ 2012 Overview, supra note 42, at 9.

⁴⁷ 2012 Overview, supra note 42, at 9.

⁴⁸ EIA Report, supra note 32, at 6.

In the power sector, natural gas has historically been used as a backup for coal and nuclear base load generation. It may serve as a "bridge fuel" between coal and renewable sources. For such gas used at the margin, any increase in electricity prices resulting from LNG exports would be limited by the fact that power producers will simply substitute away from gas as soon as it becomes more expensive than other fuels.⁴⁹ The The EIA Report projects that LNG exports will increase electricity prices under Reference case conditions by between 2% and 3%.⁵⁰ Similarly, the Deloitte Report forecasts that electricity prices will rise by 1.2% in Louisiana, part of the Gulf Coast region where most LNG exports are expected to occur, but less than 1.0% in the Midwest.⁵¹

Despite Sierra Club's claim that small marginal price increases resulting from LNG exports will somehow prevent natural gas from becoming a viable alternative fuel for power generation, natural gas is considered an economical alternative at prices much higher than projected in even the highest price-impact scenarios. The demand for natural gas was increasing in the power sector well before the shale gas revolution. In 2005, when average wellhead prices hovered above \$7 per MMbtu, the EIA projected that natural gas demand would increase by 90% between 2003 and 2020.⁵² The power sector, which built natural gas-fired generation plants while prices were increasing, will continue to benefit from the low prices and abundant supply of domestic shale gas.

⁴⁹ Brookings Report, supra note 34, at 33.

⁵⁰ EIA Report, supra note 32, at 16.

⁵¹ Deloitte Report, supra note 23, at 13.

⁵² EIA, Annual Energy Outlook 2005 at 143, 159, *available at* ftp://tonto.eia.doe.gov/forecasting/0383%282005%29.pdf

Sierra Club alleges that FLEX's proposed LNG exports will destroy American jobs by raising production costs for energy-intensive domestic industries. Admittedly, the decline in natural gas prices has been a tremendous boon to the U.S. industrial sector, and the availability of inexpensive natural gas has spurred new investments in petrochemical and plastic facilities in the United States.⁵³ However, because most European and Asian competitors use oil-based products such as naphtha and fuel oil as feedstock, U.S. companies enjoy a significant cost advantage over global competitors and are unlikely to be affected by modest increases in natural gas prices resulting from LNG exports. In fact, The Dow Chemical Company, the largest U.S. chemical company by revenue and one of the companies announcing U.S. expansions spurred by low natural gas prices, recently acknowledged as much when its CEO, Andrew Liveris, expressed tempered support for LNG exports of up to 15% of U.S. natural gas production.⁵⁴

Increased LNG exports present an additional benefit to industrial consumers in the form of ethane, a liquid byproduct of natural gas production. In the U.S., liquid components of natural gas, including ethane, are generally separated from the gas stream prior to liquefaction and used by chemical producers. Ethane is a primary feedstock for ethylene, a petrochemical product with numerous applications. According to a study by the American Chemistry Council, a 25%

⁵³ Brookings Report, supra note 34, at 34.

⁵⁴ Jack Kaskey, U.S. Gas Export Limit of 10% Would Be 'Smart,' Dow CEO Says, Bloomberg News (April 26, 2012), available at http://mobile.bloomberg.com/news/2012-04-26/u-s-gas-export-limit-of-10-would-be-smart-dow-ceo-says.html

⁵⁵ Joe Carroll, *LNG Export Plant Verges on U.S. Approval Amid Shale Glut*, Bloomberg News (April 13, 2012) *available at* http://www.businessweek.com/news/2012-04-12/lng-export-plant-verges-on-u-dot-s-dot-approval-amid-shale-glut#p2

increase in ethane production would yield a \$32.8 billion increase in U.S. chemical production.⁵⁶ Ethane production increased by 30% between 2009 and 2011 and is now at an all-time high production of more than one million barrels per day.⁵⁷

Sierra Club asserts, incorrectly, that the economic benefits of natural gas production cited in the FLEX Application are overly optimistic. FLEX relied upon a well-accepted economic multiplier to calculate its estimate of 17,000 to 21,000 jobs created by both the Liquefaction Project and the natural gas production required to support the proposed LNG exports. The Sierra Club claims that the NGA's public interest analysis requires DOE/FE to determine "whether the country would be better off with FLEX's proposal than without it." Despite Sierra Club's objections, the public policy aspects of this question have been answered. The current Presidential Administration's position on whether the country is better off as a result of natural gas production is clear and unambiguous. As stated in his 2012 State of the Union address, "[w]e have a supply of natural gas that can last America nearly one hundred years, and my Administration will take every possible action to safely develop this energy. Experts believe this will support more than 600,000 jobs by the end of the decade ... The development of natural gas will create jobs and power trucks and factories that are cleaner and cheaper, proving that we don't have to choose between our environment and our economy."

⁵⁶ American Chemistry Council, Shale Gas and New Petrochemicals Investment: Benefits for the Economy, Jobs, and U.S. Manufacturing at p.22 (March 2011), available at http://www.americanchemistry.com/ACC-Shale-Report

⁵⁷ EIA statistics, available at http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=METFPUS1&f=M.

⁵⁸ Sierra Club Protest, at 47.

⁵⁹ Barack Obama, *Remarks by the President in State of the Union Address* (January 2012), available at http://www.whitehouse.gov/the-press-office/2012/01/24/remarks-president-state-union-address

III. CONCLUSION

DOE/FE has a well-established policy of promoting competition in the marketplace by

allowing commercial parties to freely negotiate their own trade arrangements. Limiting LNG

exports by denying the FLEX Application would constitute a de facto subsidy to domestic

consumers at the expense of domestic producers, erode the ability of the U.S. to reduce its trade

deficit, prevent the creation of thousands of needed jobs, undermine current U.S. foreign policies

and severely reduce potential and badly needed tax revenues at the federal, state and local levels.

The Sierra Club Protest should be ignored in favor of allowing the markets to allocate U.S.

natural gas supplies to their most efficient uses, which will have incidental benefits to the U.S.

economy, balance of trade, energy security, and the environment.

Sierra Club has fundamentally failed to demonstrate that the FLEX Application is

inconsistent with the public interest. FLEX respectfully requests that DOE/FE consider the

FLEX Application in light of the data it contains, the extensive work and analysis of EIA, and

the established policy of DOE/FE. FLEX respectfully requests that DOE/FE deny Sierra Club's

Protest, issue its order consistent with the action requested in the FLEX Application and Answer,

and approve the requested export to non-FTA countries.

Respectfully submitted,

Attorneys for

Freeport LNG Expansion, L.P.

FLNG Liquefaction, LLC

May 14, 2012

- 21 -

VERIFICATION and CERTIFIED STATEMENT

County of Los Angeles

State of California

I, Les LoBaugh, being duly sworn on his oath, do hereby affirm that I am a duly authorized representative of Freeport LNG Expansion, L.P. and FLNG Liquefaction LLC; that I am familiar with the contents of this application; and that the matters set forth therein are true and correct to the best of my knowledge, information and belief.

Les LoBaugh

Sworn to and subscribed before me, a Notary Public, in and for the State of California, this 14th day of May, 2012.

Vilma Capili, Notary Public

VILMA B. CAPILI
Commission # 1910290
Notary Public - California
Los Angeles County
My Comm. Expires Oct 24, 2014

LA 45196 v3:010271.0008

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon the Sierra Club and on DOE/FE for inclusion in the FE docket in the proceeding in accordance with 10 C.F.R. § 590.107(b)(2011).

Dated at Los Angeles, California, this 14th day of May, 2012.

Karmala R. Beasley

Brownstein Hyatt Farber Schreck, LXP 2029 Century Park East, Suite 2100

Los Angeles, CA 90067