Received 5/23/12

UNITED STATES OF AMERICA DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY

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IN THE MATTER OF

Cameron LNG, LLC

FE DOCKET NO. 11-162-LNG

Sierra Club's Motion to Reply and Reply Comments

Pursuant to 10 C.F.R. § 590.302(a), Sierra Club moves for leave to reply to Cameron LNG's ("Cameron") Response to its Protest and Motion to intervene. Sierra Club's reply is incorporated into this document.

I. Sierra Club Hereby Moves For Leave to Reply to Cameron's Response

Although DOE/FE rules do not automatically provide parties the right to a reply, the rules allow for a wide range of procedural motions. *See* 10 C.F.R. §§ 590.302 & 590.310. "Any party may file a motion requesting additional procedures." 10 C.F.R. § 590.310. Sierra Club requested a reply motion in its timely initial protest filing, and Cameron did not oppose it. *See* Sierra Club Protest ("Protest") at 5 n.2. The request, which Sierra Club now renews, is therefore timely, and there is good cause to grant it. DOE/FE should do so here for several reasons:

<u>First</u>, the Natural Gas Act (NGA) requires DOE/FE to decide whether LNG exports are in the "public interest." 15 U.S.C. § 717b. As Sierra Club explained in its Protest, the public interest embraces a wide range of issues, including environmental concerns. *See* Protest at 6-8 (citing, *e.g.*, *Nat'l Ass'n for the Advancement of Colored People v. Federal Power Commission*, 425 U.S. 662, 670 n.4 & n.6 (1976)). Sierra Club has described its extensive work to protect the public interest, and, in particular, the interests of the thousands of Sierra Club members who will be affected by Cameron's proposal. Protest at 3-5 & Ex. 1. DOE/FE should ensure that these interests receive a fair hearing by allowing Sierra Club to respond to Cameron's arguments.

<u>Second</u>, Cameron mounts attacks on Sierra Club's motion to intervene and upon the arguments in its protest. These attacks are misguided. To ensure that DOE/FE has been fully briefed on all sides of the issues before it, Sierra Club should be allowed to respond to Cameron's contentions.

For the foregoing reasons, Sierra Club therefore moves for leave to file the reply comments which follow.

II. Sierra Club's Reply

A. Sierra Club Should Be Granted Leave to Intervene

Cameron argues that Sierra Club's motion to intervene should be denied because the motion does not "specifically relate to the Project." Cameron Answer at 5. This is incorrect. Sierra Club identified environmental impacts, including effects resulting from induced drilling, that would "specifically" result from the proposed project. Cameron is correct that many of our arguments also relate to "LNG exports and shale gas development as a general matter." *Id.* Because these "general" concerns identify harms that will be caused or aggravated by the specific proposal under consideration, however, Sierra Club has plainly set out "clearly and concisely the facts upon which" its claimed interest is based. 10 C.F.R. § 590.303(c). DOE/FE regulations require no more.

B. Both The Natural Gas Act and The National Environmental Policy Act Require Consideration of Environmental Impacts Prior to Issuance of A Conditional Order

1. The Natural Gas Act's "Public Interest" Standard Incorporates Environmental Issues

Pursuant to the Natural Gas Act ("NGA") and subsequent delegation orders, DOE/FE must determine whether Cameron's proposal to export LNG to nations which have not signed an applicable free trade agreement ("FTA") with the United States is "consistent with the public interest." NGA § 3(a), 15 U.S.C. § 717b(a). For the reasons explained in Sierra Club's protest, this determination must incorporate consideration of environmental impacts.

As a threshold matter, although Cameron now argues that "DOE/FE is not required to consider the environmental impacts of a proposed project in determining whether the public interest warrants approval of the proposal," Cameron Answer at 8, Cameron's application affirmatively invoked purported environmental benefits as supporting a finding of consistency with the public interest, Cameron Application at 27. Cameron should not be permitted to retreat from this position in its answer.

In any event, Cameron's present position is wrong on the merits, as we previously explained. Protest at 6-8. DOE has already determined that the NGA § 3 "public interest" standard incorporates environmental impacts. Testimony of Christopher Smith, Deputy Assistant Secretary of Oil and Gas Before the Senate Committee on Energy and Natural Resources (Nov. 8, 2011);¹ Phillips Alaska Natural Gas Corporation and Marathon Oil

¹ Attached as Exhibit 2 to Sierra Club's Protest.

Company, 2 FE ¶ 70,317, DOE FE Order No. 1473, *22 (April 2, 1999); Opinion and Order Conditionally Granting Long-Term Authorization to Export [LNG] from Sabine Pass LNG Terminal to Non-Free Trade Agreement Nations ("Sabine Conditional Authorization"), DOE/FE Order 2961 at 29, 37, 40 (May 20, 2011). These prior determinations are compelled by binding judicial authority, including *Nat'l Ass'n for the Advancement of Colored People v. Federal Power Commission*, 425 U.S. 662, 670 n.4, n.6 (1976), *Udall v. Fed. Power Comm'n*, 387 U.S. 428, 450 (1967), and *N. Natural Gas Co. v. Fed. Power Comm'n*, 399 F.2d 953, 973 (D.C. Cir. 1968).

Cameron first argues that because "environmental impacts that the Project will create are to be properly analyzed during the course of a NEPA analysis," environmental impacts need not weigh in on the public interest determination. Cameron's Answer at 8. Although we agree that the National Environmental Policy Act ("NEPA") requires consideration of these impacts, NEPA in no way removes environmental impacts from the scope of the public interest determination. Cameron cites no authority to the contrary.

The only authority Cameron invokes is *North Baja Pipeline, LLC,* 123 FERC ¶ 61073 (Apr. 24, 2008) (citing Office of Consumers' Counsel v. FERC, 655 F.2d 1132, 1143 (D.C. Cir. 1980)). Cameron's Answer at 8. But neither North Baja Pipeline nor Office of Consumers' Counsel support Cameron's position. In North Baja Pipeline, FERC actually considered environmental impacts as part of its public interest analysis. FERC concluded that "the environment will not be adversely affected by" approval of the project application. 123 FERC ¶ 61073 P 82. FERC alternatively weighed potential environmental impacts against other aspects of the public interest. Id. P 83. In Office of Consumers' Counsel, the DC Circuit held that the NGA's public interest standard did not give FERC authority to regulate issues outside the purview of the NGA. There, FERC has issued an order regarding introduction of synthetic gas (produced from coal) into the interstate pipeline system. The court explained that the FERC order at issue "must be viewed realistically as directed toward obtaining financing for the proposed synthetic gas facility," and therefore outside FERC's NGA § 7 authority, which did not extend to "the production, sale or transportation of coal gas prior to its commingling with natural gas." Office of Consumers' Counsel, 655 F.2d at 1143. Specifically, the challenged FERC order included "substantial regulatory features . . . which relate[d] to the plant's construction and operation." Id. at 1144. The court rejected FERC's argument that it had authority to regulate coal gas production as a result of FERC's general "public interest" authority under NGA § 7. Id. 1146-47. The court discussed NAACP v. FPC, holding that "Our own review . . . of the purposes reasonably attributable to Congress in authorizing FERC's certification and rate setting powers reveals that it did not intend to vest FERC with those powers for the purpose of regulating and arranging financing for facilities, like Great Plains, devoted exclusively to manufacturing synthetic gas." Id. at 1147. Office of Consumers' Council is therefore inapplicable here for at least two reasons. Whereas FERC sought to carefully regulate matters outside its jurisdiction, here, DOE/FE is not asked to regulate natural gas production. Whereas the NGA's public interest standard

does not extend to coal gas production, the standard does include environmental concerns. *NAACP*, 425 U.S. 662, 670 n.4, n.6.

Accordingly, Sierra Club's protest demonstrated that the NGA public interest inquiry requires consideration of environmental impacts, and Cameron has not rebutted this argument.

2. Environmental Review Must Precede Any Public Interest Determination

Because environmental impacts factor into the public interest determination, DOE/FE logically must assess environmental impacts before making this determination. As explained in Sierra Club's protest, NEPA ensures "that environmental information is available to public officials and citizens *before* decisions are made." 40 C.F.R. § 1500.1(b) (emphasis added). Agencies must "integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values." 40 C.F.R. § 1501.2.

Without discussing these regulations, Cameron asserts that DOE/FE may postpone the NEPA analysis until after DOE/FE has assessed the public interest and granted a conditional authorization. This assertion is contrary to the regulations. It is also incoherent: analyzing environmental impacts after DOE/FE makes its public interest determination will inhibit, if not preclude, incorporation of these impacts into the public interest calculus.

The only argument and citations Cameron offers speak to the question of *who* will perform the environmental review, rather than *when* the review will be performed. Answer at 21-22. Sierra Club does not dispute that NEPA permits coordination among federal agencies, and that FERC may act as the lead agency for purposes of this project.² The regulations' allowance for coordination among agencies, however, does not speak to and cannot subvert the requirement that NEPA review preceded decisionmaking. If DOE/FE chooses to coordinate with FERC for purposes of NEPA review, DOE/FE must wait for FERC to complete the NEPA process before making a public interest determination, conditional or otherwise.

² Note, however, that DOE/FE retains an independent obligation to ensure the adequacy of NEPA review. If FERC performs an adequate NEPA assessment, DOE/FE need not "duplicate" it, *Sierra Club v. U.S. Army Corps of Eng'rs*, 295 F.3d 1209, 1215 (11th Cir. 2005), but if FERC completes a deficient assessment, it would be arbitrary and capricious for DOE/FE to rely thereon.

3. Induced Gas Production Is A Reasonably Foreseeable Consequence of Export

Cameron's export proposal, if approved, will induce additional natural gas production. Cameron does not seriously dispute this. Indeed, Cameron continues to rely on induced production in its economic arguments, where Cameron asserts that exports will spur natural gas production, generating jobs and thereby furthering the public interest. Answer at 16; *see also* Application at 23 (making similar jobs arguments), Appendix C, Black and Veatch Report at 8 (asserting that as early as 2020, 1.17 bcf/d of the gas consumed by the project will come from increased production).

Cameron therefore apparently urges DOE/FE to use one standard of foreseeability when assessing economic benefits and a second, more stringent standard when assessing environmental impacts. DOE/FE must reject this request, and view benefits and costs through the same lens. Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n, 481 F.2d 1079, 1092 (D.C. Cir. 1973). In Scientists' Institute for Public Information, the Atomic Energy Commission had performed a NEPA analysis for nuclear power plants, and excluded the environmental costs of long term nuclear waste storage and disposal from its NEPA analysis. Id. The Commission had prepared a 30-year cost-benefit analysis touting the project's purported benefits, and had used this analysis in seeking to persuade Congress to fund the project. Id. The agency had nonetheless concluded that assessing environmental impacts on this scale would require a "crystal ball inquiry," and the agency accordingly omitted such assessment. Id. at 1086, 1092. The court rejected this approach, concluding that there was no reason to believe that environmental forecasts would be any less accurate than the agency's analysis of economic benefits, and that the agency could not impose a higher standard of certainty on environmental review. Id. at 1092.

Cameron then mistakenly relies on *Central New York Oil and Gas Company, LLC*, 137 FERC 61,121 (2011) ("CNYOG Order"), *reh'g* 138 FERC 61,104 (2012). FERC orders carry merely persuasive weight before DOE, and the cited orders were wrongly decided, such that their flawed interpretation of "reasonably foreseeable" is unpersuasive. Additionally, these orders rest on facts not present here. There, FERC concluded that increased production was not a reasonably foreseeable consequence of the proposed pipeline because the same gas could be sold in the same markets with or without the pipeline. CNYOG Order PP 91-92. That is not the case here: natural gas cannot be exported to non-free trade agreement countries without DOE/FE approval. As such, the production necessary to supply this market will not occur absent DOE/FE grant of export licenses. *See also* Answer at 11-12 (reiterating Cameron's contention that gas producers will increase production to supply exports). A second distinction is that in CNYOG cases, the pipeline proponents did not predict increased production jobs as an economic benefit of the pipeline. Here, in contrast, Cameron itself predicts increased production as a result of the proposed export, and every other observer joins in this prediction. Cameron's remaining foreseeability argument is that DOE/FE cannot identify "each hypothetical or potential gas production site that might one day be developed." Answer at 20. This presents a straw man argument, as Sierra Club never suggested that such fine-grained prediction was required. DOE/FE can and must assess the aggregate impact of wells sufficient to provide the gas this project will require. Such an assessment does not require prediction as to where individual wells will be placed. This type of macro-level analysis is often performed in programmatic Environmental Impact Statements, and is appropriate here.³

4. State Regulation of Gas Production Does Not Remove Induced Gas Production from The Scope of DOE/FE Review

State regulation of gas production does not relieve DOE/FE of the obligation to consider export's production-inducing effects and the associated environmental impacts. Cameron argues to the contrary by misapplying Department of Transportation v. Public Citizen, 541 U.S. 752 (2004). Department of Transportation held that "where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect," and that the effect could be excluded from NEPA analysis. Id. at 770 (emphasis added). There, where the agency had "no discretion to prevent the entry of Mexican trucks, its [environmental assessment] did not need to consider the environmental effects arising from the entry." Id. (emphasis added). Here, DOE/FE unquestionably has authority to prevent export by virtue of its public interest analysis. Because environmental impacts are within the scope of the NGA, DOE/FE has the authority to prohibit export on the basis of environmental concerns. Prohibiting export would prevent the effect of inducing the additional production that would satisfy the export market. Accordingly, Department of Transportation does not support Cameron's argument.

The fact that states can also affect gas production's impacts, in that state regulate gas production directly, does not remove induced production from the ambit of DOE/FE's NGA and NEPA review. This conclusion is plain from the many cases requiring, for example, NEPA analysis of vehicle traffic that non-transportation federal projects will induce. *Michigan Gambling Opposition v. Kempthorne*, 525 F.3d 23, 29 (D.C. Cir. 2008), *Taxpayers of Michigan Against Casinos v. Norton*, 433 F.3d 852, 863 (D.C. Cir. 2006). Similarly, states and other federal agencies, rather than DOE/FE, regulate jobs in the gas production industry, but Cameron concedes that these jobs are within the purview of DOE/FE's public interest analysis.

³ Indeed, as Sierra Club's protest argues, DOE/FE should prepare or cause to be prepared a programmatic EIS that encompasses all pending export applications.

5. Cameron Does Not Meaningfully Dispute Sierra Club's Characterization of The Environmental Harms Caused by Increased Production or The Conclusion That These Harms Demonstrate That The Project Is Contrary to The Public Interest

Cameron asserts that it "respectfully disagrees with the Sierra Club's position in connection with the environmental effects of [Cameron's] Project," but offers no reasoning or basis for this disagreement. Answer at 21. Accordingly, the only material in the record regarding environmental effects is that submitted by the Sierra Club. As explained in Sierra Club's protest, this evidence clearly demonstrates the environmental harms associated with gas production and the absence of environmental benefit from LNG export.

C. Price and Economic Impacts

Sierra Club's protest demonstrated that Cameron overstates the economic benefit of the project and fails to account for many economic costs the project will entail, both in terms of job creation and domestic gas prices. Cameron fails to rebut any of these arguments.

First, Sierra Club's protest identified many flaws inherent in "input-output" economic models. Protest 46-53. Cameron responds by observing that its economic forecasts were not derived from IMPLAN, a specific suite of input-output modeling methods. Answer at 18. This response is irrelevant, because Cameron does not dispute that the model it *did* use is another input-output model, and Sierra Club's arguments pertain to input-output models generally, rather than to features unique to IMPLAN.⁴ Cameron has not identified any methodological differences between the model it used and the general aspects of input-output models Sierra Club criticizes.

Second, Cameron relatedly argues that "Sierra Club did not present analysis or data to support an assertion that the Project is inconsistent with the public interest due to hypothetical counterfactuals or foregone opportunities." *Id.* This is incorrect. Sierra Club demonstrated that, when counterfactuals, flaws in Cameron's input-output model, and empirical data are considered, it is clear that induced production (and hence export generally) will have little, if any, economic benefit. Protest at 46-53, especially 50. This minimal showing of economic benefit must be weighed against the significant showing

⁴ See Protest at 46 ("Cameron's economic estimates are based on an "input-output" economic model, presumably IMPLAN."). Our protest's arguments refer to input-output models generally, without referencing IMPLAN.

of environmental harm. On the balance, DOE/FE must conclude that the project is contrary to the public interest.⁵

Third, Cameron criticizes the studies Sierra Club cites as not "relat[ing] specifically to the project, but [] instead [being] general and theoretical in nature." Answer at 19. There is no logical or legal requirement for studies to be particular to this project. Sierra Club cites studies that show general trends under which, for example, the boom-bust cycle of natural gas production does not leave communities economically better off than they would have been otherwise. Protest at 49-52. Cameron provides no reason to think that production that will be induced by its export proposal will be any different than production in general. Accordingly, these general studies are relevant evidence of the limited, or potentially negative, economic impacts of gas production associated with Cameron's proposal.

As to gas prices, Sierra Club explained that the Energy Information Administration's January 2012 study, *Effect of Increased Natural Gas Exports on Domestic Energy Markets*, demonstrated that Cameron's proposed export would harm the public interest by increasing domestic gas prices. Protest at 43-46. Cameron criticizes this study by arguing that it did not "consider natural gas producer responses to increased natural gas demand." Answer at 12. Contrary to Cameron's assertion, the EIA study concluded that producers would respond to exports by increasing production, and that this increased production would supply the majority of the gas exported. EIA Study at 11.

Cameron separately seeks to minimize the effect of the EIA Study by urging DOE/FE to adopt the low range of estimates included therein. As Sierra Club explained, the "high" export scenarios considered by EIA included export of only 12 bcf/d. Pending applications seek the export of over 16 bcf/d, and DOE/FE must examine the cumulative impacts of these pending applications—DOE/FE cannot grant Cameron's application on the assumption that other pending projects will be aborted. Accordingly, DOE/FE should use, at a minimum, the EIA Study's "high" export scenarios.

Cameron also seeks to introduce a May 2, 2012 report by the Brookings Institute on export and prices. The Brookings Report contains no meaningful new analysis. *See generally* Ebinger et al., *Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas* (2012). It offers little insight on economic issues (and what analysis it does offer is either contradicted by the data or offers scant support for export) and no meaningful data on environmental concerns.

⁵ Moreover, regardless of the magnitude of potential economic benefit, the severity of potential environmental effects is "significant," obliging DOE/FE to prepare an environmental impact statement before making a public interest determination.

As to economic issues, the Brookings Report only compiles existing analyses (many of them prepared by gas industry consultants). *See id.* at 29-38. It conducts no new modeling or data analysis, meaning that it adds little, if any, new information for DOE/FE's consideration. It suggests, first, that lower-end estimates of export volumes may be more likely, with correspondingly relatively low price impacts, *id.* at 32-33, but this assumption is not compelling on existing data. Instead, LNG export proposal volumes have steadily increased, and are now far above even the high-end estimates used in the Brookings Report. *See* Protest at 43 (citing http://www.fossil.energy.gov/programs/gasregulation/LNG_Summary_Table_3_23_12.2.pdf and Application of Corpus Christi Liquefaction, LLC, FERC docket PF12-3). To be sure, it is possible that some lower volume will

ultimately be exported, but DOE/FE must consider, at a minimum, the cumulative

impacts on the domestic economy of all export proposals now before it.

Further, importantly, the Brookings Report offers little support for the inflated job figures offered by export proponents, and does not address the weaknesses of those figures. The report acknowledges that construction activities and increased fracking will produce some jobs, Brooking Report at 37, but finds that, beyond those upstream sectors, "the net impact of LNG exports is likely to be minimal." *Id.* Because the Brookings Report does not consider jobs displaced by increased fracking, and assumes limited employment effects stemming from gas price increases, this tepid endorsement should be seen as an optimistic description of LNG exports' effects on the job market. Had the Report considered displaced workers and economic damage from fracking, as Sierra Club urges here, its conclusions might well have been more negative.

Second, as to environmental issues, the Brookings Report is essentially silent. The report simply does not forecast the environmental impacts of increased fracking, or of LNG consumption and production, and its brief discussion of existing environmental issues, *id.* at 7, is one page long, followed by a few pages listing state regulatory efforts, *id.* at 8-11. The Report contains no environmental data or modeling results. It briefly discusses only three environmental issues – groundwater contamination caused directly by fracking, methane leaks, and induced seismicity – none in any depth or with any quantitative rigor. *Id.* at 7. It also fails to discuss many types of environmental impacts, including land use disruption, air pollution from smog-forming and cancer-causing volatile organic compounds, and the major challenges associated with safe disposal of wastewater from fracked wells. The Report, in short, is a collection of thinly-sourced assertions that does not contain any expert (or even serious) effort to assess the environmental impacts of increased fracking associated with export. DOE/FE may not rely on this limited compilation of assertions to draw any conclusions.

III. Conclusion

The record before DOE/FE shows that LNG exports will (1) raise gas prices, (2) cause significant economic disruption and support fewer jobs than Cameron claims, and (3) come with major environmental and resultant economic costs. Cameron's largely rhetorical response to Sierra Club's protest does not seriously disturb any of these conclusions. As such, on this record, DOE/FE can only rationally conclude that Cameron's proposed exports are not in the public interest. DOE/FE also may not move forward until it fully complies with NEPA, ESA, NHPA, and its other statutory obligations. Sierra Club's protest should be granted.

Dated: May 23, 2012.

Respectfully submitted,

/s/ Nathan Matthews

Nathan Matthews Sierra Club Environmental Law Program 85 2nd St., Second Floor San Francisco, CA 94105 (415) 977-5695 Nathan.Matthews@sierraclub.org

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CERTIFICATE OF SERVICE

I hereby certify that I caused the above documents to be served on the applicant and all

others parties in this docket on May 23,2012.

Dated at San Francisco, CA, this 23rd day of May, 2012.

<u>/s/Nathan Matthews</u> Nathan Matthews Associate Attorney Sierra Club Environmental Law Program 85 Second Street, Second Floor San Francisco, CA 94105 Telephone: (415) 977-5695 Fax: (415) 977-5793 Email: nathan.matthews@sierraclub.org