

UNITED STATES OF AMERICA **DEPARTMENT OF ENERGY** OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT

In the Matter of:)	
)	Docket No. 16-28-LNG
Venture Global Plaquemines LNG, 1	LLC)	

ANSWER OF VENTURE GLOBAL PLAQUEMINES LNG, LLC TO PROTESTS OF LIMITED AMENDMENT APPLICATION

Pursuant to Sections 590.302(b), 303(e), and 304(f) of the regulations of the Department of Energy ("DOE"), 1 Venture Global Plaquemines LNG, LLC ("Plaquemines LNG") hereby submits this answer in opposition to the following submissions filed with DOE's Office of Fossil Energy and Carbon Management ("DOE/FECM") in the above-captioned proceeding: (1) the "Motion to Intervene and Protest of Sierra Club and Healthy Gulf;" and (2) the "Motion to Intervene and Protest of Public Citizen, Inc."²

These Protests concern the application filed pursuant to Section 3 of the Natural Gas Act ("NGA") by Plaquemines LNG on March 11, 2022 (the "Amendment Application") for a limited amendment of its existing long-term, multi-contract authorizations to export domestically produced liquefied natural gas ("LNG") from its terminal that is currently under construction on the west bank of the Mississippi River in Plaquemines Parish, Louisiana (the "Export Terminal" or "Project").³ Plaquemines LNG

¹⁰ C.F.R. §§ 590.302(b), 303(e), and 304(f) (2022).

For ease of references, these submissions are referred to herein as the "Sierra Club Protest" and "Public Citizen Protest" respectively, and together as the "Protests."

Plaquemines LNG was granted long-term, multi-contract authority to export LNG to (1) nations with which the United States has not entered into a Free Trade Agreement ("FTA") requiring the national

plans, with the requisite approvals from the Staff of the Federal Energy Regulatory Commission ("FERC"), a phased operational start-up of the Export Terminal with the first export of LNG targeted by the end of 2024 and the commencement of commercial operations in approximately mid-2025.

In the Amendment Application, Plaquemines LNG requested that its total authorized export volumes, for exports to both FTA and non-FTA nations, be increased from 1,240 billion cubic feet per year ("Bcf/yr") – which is equivalent to approximately 24.0 million metric tonnes per annum ("MTPA") of LNG – to 1,405.33 Bcf/yr, or approximately 27.2 MTPA. DOE/FECM has already amended Plaquemines LNG FTA authorization to increase the authorized volumes as requested, in Order No. 3866-B issued in this proceeding on June 13, 2022. The Protests relate to the portion of the Amendment Application applicable to non-FTA exports.

Contemporaneously with the Amendment Application, Plaquemines LNG similarly filed an application with FERC, which remains pending in FERC Docket No. CP22-92, to amend its FERC authorization to increase the Project's peak liquefaction and export capacity under optimal conditions to that same increased amount of 27.2 MTPA.⁴ The increased amounts proposed in Plaquemines LNG's filings with both agencies reflect a refined analysis of the peak liquefaction and LNG export capacity, under optimal conditions, of the already-authorized Project facilities. The proposed increase in the

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treatment of natural gas in DOE/FE Order No. 4446 issued in FE Docket No. 16-28-LNG on October 16, 2019, and (2) FTA nations in DOE/FE Order No. 3866 issued in the same docket on July 21, 2016. Each of the export authorizations extends through December 31, 2050, as amended in DOE/FE Order Nos. 3866-A and 4446-A.

FERC authorized the siting, construction, and operation of the Project in *Venture Global Plaquemines LNG*, *LLC*; *Venture Global Gator Express*, *LLC*, 168 FERC ¶ 61,204 (2019). This FERC order provides for 24.0 MTPA as the current maximum liquefaction capacity under optimal conditions.

authorized volumes does *not* involve the construction of any new facilities nor any modification of the previously authorized facilities.

Authorizing the increased amount of natural gas exports by Plaquemines LNG, when applicable under optimal circumstances, to non-FTA nations as well as FTA nations, will help diversify global LNG supplies and improve energy security for U.S. allies and trading partners around the world, while also providing economic benefits to the U.S. economy. Moreover, NGA Section 3(a) establishes a rebuttable presumption that proposed exports of natural gas are in the public interest.⁵ Accordingly, DOE/FECM has consistently held that it must grant LNG export applications unless opponents of an application overcome this presumption by making an affirmative demonstration that the proposed export is inconsistent with the public interest.⁶ The protesting parties' arguments here fall far short of the required demonstration. Therefore, and for all the reasons explained below and consistent with established policy and precedent, DOE/FECM should reject the arguments made in the Protests and grant the requested amendment of Plaquemines LNG's non-FTA export authorization, following the expected FERC decision recognizing the increased capability of the already-authorized facilities.⁷

¹⁵ U.S.C. § 717b(a) (2018); see also, e.g., Sierra Club v. U.S. Dep't of Energy, 867 F.3d 189 at 203 (D.C. Cir. 2017) ("We have construed [NGA section 3(a)] as containing a 'general presumption favoring [export] authorization.") (quoting W. Va. Pub. Serv. Comm'n v. U.S. Dep't of Energy, 681 F.2d 847, 856 (D.C. Cir. 1982)).

E.g., Philips Alaska Natural Gas Corp. & Marathon Oil Co., DOE/FE Order No. 1473 at 13 (Apr. 2, 1999); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 2961 at 28 (May 20, 2011); Dominion Cove Point LNG, LP, DOE/FE Order No. 3331-B at 11 (Apr. 18, 2016); Venture Global Calcasieu Pass, LLC, DOE/FE Order No. 4346 at 19 (Mar. 5, 2019); Venture Global Plaquemines LNG, LLC, DOE/FE Order No. 4446 at 18-19 (Oct. 16, 2019).

FERC has repeatedly recognized: (1) that calculating the maximum or peak capacity of a given set of liquefaction facilities may not be possible at the time an initial application for construction is filed and (2) it is appropriate for its ultimate authorization to reflect the maximum or peak capacity as such a level

I. The Protests Do Not In Any Way Demonstrate that the Amendment to Increase Authorized LNG Exports Is Inconsistent with the Public Interest.

The Protests of the Amendment Application present very general opposition to the export of LNG from the U.S., and challenge long-established DOE/FECM policies, with little to no focus on the specifics of Plaquemines LNG nor on the context of an increase in authorized export volumes without any change in facilities. Furthermore, many of the arguments in the Protests have been consistently rejected by DOE/FECM in numerous decisions over more than a decade through three presidential administrations. Most analogously and most recently, DOE/FECM has issued, just since March this year, four orders increasing authorized non-FTA export volumes for other projects in very similar circumstances as here, following FERC's approval of comparable "uprate" applications increasing the authorized peak output with no change in facilities. Nothing in the protestors' arguments warrants any change in general DOE/FECM policy, nor provides any basis to conclude that Plaquemines LNG's similar proposal to increase its authorized volume of exports to non-FTA nations would be inconsistent with the public interest.

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represents the actual potential production of LNG. See, e.g., Sabine Pass Liquefaction, LLC, 146 FERC ¶ 61,117 at P 12 (2014); Freeport LNG Development, L.P., et al., 156 FERC ¶ 61,019 at P 13 (2016); Magnolia LNG LLC, 171 FERC ¶ 61,231 at P 8 (2020); Golden Pass LNG Terminal LLC, 174 FERC ¶ 61,053 at P 9 (2021); Corpus Christi Liquefaction, LLC, 177 FERC ¶ 61,029 at P 7 (2021); Sabine Pass Liquefaction, LLC, 177 FERC ¶ 61,030 at P 9 (2021).

Cheniere Marketing LLC & Corpus Christie Liquefaction, LLC, DOE/FE Order No. 4799 (Mar. 16, 2022) (hereinafter "Cheniere Marketing 2022"); Sabine Pass Liquefaction, LLC, DOE/FE Order No. 4800 (Mar. 16, 2022) (hereinafter "Sabine Pass 2022"); Golden Pass LNG Terminal LLC, DOE/FECM Order No. 3978 (April 27, 2022) (hereinafter "Golden Pass 2022"); Magnolia LNG LLC, DOE/FECM Order No. 3909-C (April 27, 2022) (hereinafter "Magnolia 2022").

A. The World's Need For U.S. LNG Has Never Been Clearer, and Plaquemines LNG Is Poised to Supply It.

The need around the world for additional export of the abundant, low-cost, and clean-burning U.S. natural gas has never been clearer, and the economic, geopolitical, and environmental benefits of LNG exports are manifestly in the public interest. Sierra Club attempts to grapple with the urgent current global need for natural gas by beginning its Protest with a discussion of "global strategic interests" "in light of recent events in Ukraine." Sierra Club claims that "[t]he proposed increase in export capacity will not provide *any* help in reducing reliance on Russian gas in the short term," adding that "[n]or is the additional export capacity needed in the medium or long term, or for the next crisis." The arguments coming from the Sierra Club are hardly surprising, given that it has consistently opposed LNG exports for many years; ¹¹ but they are especially unpersuasive when advanced about this Project, at this time.

After its affiliated project Venture Global Calcasieu Pass (which is in the commissioning phase and has been exporting LNG cargoes since the start of March¹²)

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⁹ Sierra Club Protest at 5-6.

¹⁰ *Id.* at 5 (emphasis in original).

In 2015, Sierra Club petitioned the U.S. Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") for review of five long-term LNG export authorizations issued by DOE/FECM for the first wave of U.S. LNG export projects (outside Alaska), which it had actively opposed at the agency. The D.C. Circuit denied four of the five petitions for review: one in a published decision issued on August 15, 2017, Sierra Club v. U.S. Department of Energy, 867 F.3d 189 (D.C. Cir. 2017) (denying petition of review of the LNG export authorization issued to Freeport LNG Expansion, L.P., et al.), and three in a consolidated, unpublished opinion issued on November 1, 2017. Sierra Club v. U.S. Department of Energy, Nos. 16-1186, 16-1252, 16-1253, 703 Fed. Appx. 1 (D.C. Cir. Nov. 1, 2017) (denying petitions of review of the LNG export authorization issued to Dominion Cove Point LNG, LP; Sabine Pass Liquefaction, LLC; and Cheniere Marketing, LLC, et al., respectively). Sierra Club subsequently withdrew its remaining fifth petition for review. See Sierra Club v. U.S. Dep't of Energy, No. 16-1426, Per Curium Order (D.C. Cir. Jan. 30, 2018) (granting Sierra Club's unopposed motion for voluntarily dismissal). Yet, Sierra Club continues to oppose LNG exports, largely advancing the same arguments that have been consistently rejected.

The most recent DOE "LNG Monthly" shows that Calcasieu Pass exported over 61 million Mcf of natural gas from March through May, with most of it delivered to Europe, helping to provide it much

and the Golden Pass LNG project (which has been under construction for over three years ¹³), Plaquemines LNG is almost certain to be the next new project that will begin exporting incremental U.S. LNG to the world. Venture Global announced a final investment decision and successful closing of the \$13.2 billion project financing for the initial phase (of 13.33 MTPA) of the Plaquemines LNG facility and the associated Gator Express pipeline on May 25, 2022. ¹⁴ Apparently unimpressed with the largest project financing in the world this year, Sierra Club observes "Venture Global has not even announced a final investment decision for the second phase of the Plaquemines LNG project." Yet, the FID on Phase 2 of the Project is coming too.

Plaquemines LNG stated in the Amendment Application (at 6-7) that it had entered into binding, 20-year LNG Sales and Purchase Agreements ("SPAs") for a total of 13 MTPA from the first phase of the Project with five major international companies. Since filing the Amendment Application in March, Plaquemines LNG has announced the signing of five additional, long-term SPAs, so that it has now contracted for a total of 17.75 MTPA of the nameplate capacity from its Project with ten companies. These

needed LNG supply and to alleviate its growing energy crisis. *See* LNG Monthly (July 2022), available at: https://www.energy.gov/sites/default/files/2022-07/LNG%20Monthly%20May%202022.pdf.

See Press Release, "Golden Pass Products export project to begin construction," Feb. 5, 2019, available at: https://www.goldenpasslng.com/newsroom/golden-pass-products-export-project-to-begin-construction.

See Press Release, "Venture Global Announces Final Investment Decision and Financial Close for Plaquemines LNG," May 25, 2022, available at: https://venturegloballng.com/press/venture-global-announces-final-investment-decision-and-financial-close-for-plaquemines-lng/.

Sierra Club Protest at 5.

In compliance with its export authorizations, Plaquemines LNG has submitted all of its long-term SPAs to DOE/FECM, and summaries of them are available at: https://www.energy.gov/fecm/articles/plaquemines-lng-facility.

contracts, as well as on-going active negotiations with counterparties for the remaining nameplate capacity, set the stage for the Phase 2 FID following not far behind Phase 1.

Furthermore, Plaquemines LNG's largest single customer, with a 20-year SPA for 4 MTPA of LNG, is the Polish Oil and Gas Company, PGNiG, 17 which recently had its gas supplies cut off by Gazprom. 18 And one of Plaquemines LNG's most recently announced customers is EnBW Energie Baden-Württemberg AG, one of the largest energy companies in Germany: 19 another nation with an urgent, and long-term, need to replace Russian natural gas supplies. 20 Plaquemines LNG's additional European customers include BP, Shell, Repsol, Edison, and GALP. Thus, Sierra Club's claims about the supposedly limited nature of Europe's need for U.S. LNG – and the charge that exports from Plaquemines LNG will not help Europe – are manifestly disproved by the actual, real world evidence of Plaquemines LNG's contracts.

Undoubtedly, the geopolitical importance of U.S. natural gas supplies has been highlighted and dramatically reinforced by recent events associated with Russia's

See Press Release, "Venture Global LNG and PGNiG Finalize Expansion of LNG Partnership Venture Global LNG and PGNiG Finalize Expansion of LNG Partnership," Sept. 2, 2021, available at: https://venturegloballng.com/press/venture-global-lng-and-pgnig-finalize-expansion-of-lng-partnership/.

See Press Release, "PGNiG and GAZ-SYSTEM: information on gas supplies under Yamal contract," April 26, 2022, available at: https://en.pgnig.pl/news/-/news-list/id/pgnig-and-gaz-system-information-on-gas-supplies-under-yamal-contract/newsGroupId/1910852?changeYear=2022¤tPage=1. In addition to announcing Gazprom's action, this PGNiG press release explains: "Thanks to the implementation of the government's strategy to diversify gas supply sources, PGNiG is prepared to acquire gas from various directions, e.g., through gas interconnections on the western and southern borders and the LNG Terminal in Świnoujście, which is gradually increasing the number of LNG carriers it can receive."

See Press Release, "Venture Global and EnBW announce LNG Sales and Purchase Agreements, June 21, 2022, available at: https://venturegloballng.com/press/venture-global-and-enbw-announce-lng-sales-and-purchase-agreements/.

See generally, e.g., Financial Times, "LNG revolution: Germany's plan to wean itself off Russian gas takes shape," June 6, 2022, available at: https://www.ft.com/content/6c6352c3-cb60-48e5-aa5e-7cf02328f544.

invasion of Ukraine, as reflected in a joint statement of President Biden and European Union ("EU") President von der Leyen early this year.²¹ After the invasion, the European Commission proposed a plan to reduce Europe's dependence on Russian gas as soon as possible, including importantly a dramatic increase in its LNG imports from the United States.²² The European Commission has committed to work toward ensuring growing and stable demand for additional U.S. LNG, as the U.S. "commits to maintaining an enabling regulatory environment with procedures to review and expeditiously act upon applications to permit any additional export LNG capacities that would be needed to meet this emergency energy security objective and support the [EU's] goals, affirming the joint resolve to terminate EU dependence on Russian fossil fuels by 2027."²³

In its long-term export authorizations, DOE/FECM has consistently recognized the energy security benefits to U.S. allies and trading partners that result from U.S. LNG exports. In its most recent non-FTA export authorizations, DOE/FECM reiterated its long-standing conclusion in this regard while also highlighting the current situation.

Thus, DOE/FECM explained:

[A]n efficient, transparent international market for natural gas with diverse sources of supply provides both economic and strategic benefits to the United States and our allies. For example, in light of the recent Russian invasion of Ukraine, there are renewed concerns about energy security

Joint Statement by President Biden and President von der Leyen on U.S.-EU Cooperation on Energy Security, Jan. 28, 2022, available at: https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/28/joint-statement-by-president-biden-and-president-von-der-leyen-on-u-s-eu-cooperation-on-energy-security/. See also the joint statement of the U.S.-EU Energy Council chaired by, among others, Energy Secretary Granholm. Joint Statement on the U.S.-EU Energy Council, Office of the Spokesperson, Feb. 7, 2022, available at: https://www.state.gov/joint-statement-on-the-u-s-eu-energy-council/.

See Press Release, European Commission, REPowerEU: Joint European action for more affordable, secure and sustainable energy, Mar. 8, 2022, available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511.

See Press Release, European Commission, Joint Statement between the European Commission and the United States on European Energy Security, Mar. 25, 2022, available at https://ec.europa.eu/commission/presscorner/detail/en/statement_22_2041.

for Europe and Central Asia, particularly given the relative share of Russian natural gas supplies into those regions. By authorizing additional exports to non-FTA countries, including to U.S. allies in Europe and elsewhere, this Order will enable [the applicant] to help mitigate the acute and immediate energy security concern. More generally, to the extent U.S. exports diversify global LNG supplies and increase the volumes of LNG available globally, these exports will improve energy security for many U.S. allies and trading partners.²⁴

In a claim that seems more focused on application for proposed exports from new, future facilities, Sierra Club "contends that there is no strategic need for export capacity beyond that provided by existing facilities," pointing to the authorized exports for other facilities not yet in operation or even under construction. Yet, DOE/FECM has recently recognized the "continuing uncertainty" about whether "proposed LNG export projects will ever be realized because of the time, difficulty, and expense of commercializing, financing, and constructing LNG export terminals, as well as the uncertainties and competition inherent in the global market for LNG." In contrast, Plaquemines LNG has surmounted those hurdles and is under construction. Moreover, even adopting the Sierra Club perspective, it seems perverse to suggest that DOE/FECM should not authorize an increased export volume that will simply conform to the actual, optimal capability of facilities that are being constructed now, in favor of some other uncertain project. Such other projects, assuming their success, obviously would entail new construction with associated environmental impacts, unlike the

Cheniere Marketing 2022 at 54 (internal footnotes omitted); Sabine Pass 2022 at 55-56 (internal footnotes omitted); Golden Pass 2022 at 39 (internal footnotes omitted); Magnolia 2022 at 53 (internal footnotes omitted).

Sierra Club Protest at 6.

²⁶ Cheniere Marketing 2022 at 60; Sabine Pass 2022 at 61-62; Golden Pass 2022 at 45-46; Magnolia 2022 at 59.

increased export level proposed in the Amendment Application, which requires no new or modified facilities.

B. The Macroeconomic Benefits To the U.S. of LNG Exports Are Well-Established.

In the Amendment Application, Plaquemines LNG summarized the series of studies conducted by DOE over the years assessing the macroeconomic impacts of LNG exports to inform its decisions on applications seeking authorization to export LNG to non-FTA nations.²⁷ Sierra Club has never accepted the conclusions of those studies, and continues to challenge them here, largely with arguments that DOE/FECM has previously and consistently rejected.

Sierra Club's unsupported theory that "[f]rom an economic perspective, LNG exports are simply making most Americans worse off"²⁸ is just the opposite of the conclusion of all the detailed, economic studies conducted by DOE. Sierra Club now argues that DOE "cannot approve additional export capacities without carefully examining the continuing validity of those analyses."²⁹ Yet, DOE/FECM essentially does just that with every non-FTA export authorization it issues. Thus, in each of its export authorization on other projects' "uprate" amendments issued this year, DOE/FECM compared the analysis of the 2018 Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports Study (the "2018 Study")³⁰ with more recent

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See Amendment Application at 15-19. The multiple macroeconomic studies of LNG exports conducted by DOE are all available at: https://www.energy.gov/fecm/downloads/lng-export-studies.

Sierra Club Protest at 8.

Sierra Club Protest at 9.

EIA data and concluded that "[t]he assumptions underlying the 2018 Study's findings remain consistent with more recent assessments of current and future natural gas supply, demand, and prices" and that "the 2018 LNG Export Study is fundamentally sound." In all of those recent orders, DOE/FECM affirmed once again (as it has consistently found over more than a decade) that LNG exports will generate net economic benefits to the U.S. economy.

Sierra Club also continues to advance its unsubstantiated theories – which DOE/FECM has consistently rejected– about supposed "distributional concerns" regarding the overall positive benefits of LNG exports and, amazingly, charges that "to date, DOE has never grappled with the distributional impacts of LNG exports. . . ." In reality, DOE/FECM first rejected similar arguments by the Sierra Club about distribution impacts in the first wave of export authorizations and the D.C. Circuit held on appeal that DOE/FECM adequately addressed those concerns. Then DOE/FECM again considered and rejected Sierra Club's arguments about distributional impacts when they were advanced in its comments on the 2018 Study. In its most recent export authorizations this year, DOE/FECM once again rejected similar arguments about distribution impacts every time they were presented. 35

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Cheniere Marketing 2022 at 46, 47; Sabine Pass 2022 at 47, 48; Golden Pass 2022 at 34, 35; Magnolia 2022 at 45, 46.

Sierra Club Protest at 9.

See Sierra Club v. U.S. Dep't of Energy, Nos. 16-1186, 16-1252, 16-1253, 703 Fed. Appx. 1, at *3 (D.C. Cir. Nov. 1, 2017).

See Study on Macroeconomic Outcomes of LNG Exports: Response to Comments Received on Study, 83 Fed. Reg. 67,251 at 67,266 (Dec. 28, 2018).

See Cheniere Marketing 2022 at 50; Sabine Pass 2022 at 51; Magnolia 2022 at 49.

In short, the protesting parties have provided no basis to question DOE/FECM's long-standing recognition that LNG exports provide macroeconomic benefits to the country. Certainly, their macroeconomic arguments provide no basis to conclude that increasing the authorized level of exports by Plaquemines LNG to reflect the maximum capability of its Project would be contrary to the public interest.

C. Any Potential Increases in Domestic Natural Gas Prices Do Not Show That LNG Exports Are Contrary to the Public Interest.

Both Sierra Club and Public Citizen emphasize recent increases in domestic natural gas prices in their effort to oppose the Amendment Application.³⁶ Plaquemines LNG explained in its Amendment Application that, as a result of the increasing natural gas production and abundant reserves, domestic natural gas prices have remained very low as natural gas exports have increased, and that EIA's studies continue to project low domestic prices through 2050.³⁷ EIA's most recent projections continue to support that conclusion, as DOE/FECM recognized in its series of non-FTA authorizations issued this year.38

Attempting to draw support from assertions of its long-standing ally in opposing LNG exports, Sierra Club states that the Industrial Energy Consumers of America ("IECA") "has repeatedly written to DOE about how export-driven gas price increases are harming domestic industry."39 Of course, Sierra Club fails to acknowledge the DOE/FECM has consistently rejected IECA's arguments. In particular, IECA's

³⁶ Sierra Club Protest at 6-8; Public Citizen Protest at 1-2.

³⁷ Amendment Application at 19-24.

Cheniere Marketing 2022 at 46-47; Sabine Pass 2022 at 47-48; Golden Pass 2022 at 34-35; Magnolia 2022 at 45-46.

Sierra Club Protest at 8.

arguments were thoroughly considered and rejected by DOE/FECM when evaluating comments on the 2018 Study,⁴⁰ and again in recent non-FTA export authorizations.⁴¹

More generally, DOE/FECM has repeatedly considered and rejected arguments that potential domestic price effects are a reason to limit LNG exports. The fundamental conclusions on this point in the 2018 Study were that:

- "Increasing U.S. LNG exports under any given set of assumptions about U.S. natural gas resources and their production leads to only small increases in U.S. natural gas prices; and
- Available natural gas resources have the largest impact on natural gas prices. Therefore, U.S. natural gas prices are far more dependent on available resources and technologies to extract available resources than on U.S. policies surrounding LNG exports."⁴²

Moreover, the evidence over the years has failed to support persistent claims that LNG exports will cause significant increases in domestic natural gas prices. As U.S. natural gas exports increased over recent years, setting new record highs for seven consecutive years, ⁴³ domestic natural gas prices generally remained low. Specifically, EIA pricing data show average Henry Hub prices per Million British thermal units ("MMBtu") of \$3.10 in 2017, \$3.27 in 2018, and \$2.57 in 2019, ⁴⁴ followed by the lowest

See Response to Comments Received on the 2018 Study, supra n.34, at 67,267-269.

Cheniere Marketing 2022 at 51 (internal footnotes omitted); Sabine Pass 2022 at 52 (internal footnotes omitted).

⁴² 2018 Study, supra n.30 at 55. See also Response to Comments Received on the 2018 Study, supra n.34, at 67,267-269.

See EIA, Today in Energy, EIA expects U.S. natural gas production to rise as demand for exports grow Mar. 9, 2022, available at: https://www.eia.gov/todayinenergy/detail.php?id=51558.

See EIA, Today in Energy, "Natural gas prices in 2019 were the lowest in the past three years" Jan. 9, 2020, available at: https://www.eia.gov/todayinenergy/detail.php?id=42455.

prices in decades in 2020 with an average of just \$2.05 for Henry Hub.⁴⁵ Domestic natural gas prices did increase in 2021, with Henry Hub prices averaging \$3.89 per MMBtu as a result of numerous factors including weather disruptions, low inventories, and demand rebounding faster than supply following the pandemic.⁴⁶ And domestic prices unquestionably have increased significantly in 2022 because of some of those same factors as well as the extraordinary events leading up to and following Russia's invasion of Ukraine and the current energy crisis.⁴⁷

When considering arguments about domestic prices increases in its most recent export authorizations, DOE/FECM compared the projections in EIA's Annual Energy Outlook ("AEO") 2022 to the AEO 2017 data that was relied upon in the 2018 Study. As DOE/FECM summarized, the AEO 2022 Reference Case for 2050 projects domestic dry natural gas production of 115.6 billion cubic feet per day ("Bcf/d") and total consumption of 93.2 Bcf/d, compared to the AEO 2017 projections of 107.9 Bcf/d of production and 92.4 Bcf/d of consumption. Thus, the excess of projected production over consumption has increased significantly since the 2018 Study, further supporting LNG exports.

See EIA, Today in Energy, In 2020, U.S. natural gas prices were the lowest in decades, Jan. 7, 2021, available at: https://www.eia.gov/todayinenergy/detail.php?id=46376.

See EIA, Today in Energy, U.S. natural gas prices spiked in February 2021, then generally increased through October, Jan. 6, 2022, available at: https://www.eia.gov/todayinenergy/detail.php?id=50778; EIA, Today in Energy, Energy prices rose more than other commodities in 2021, Jan. 3, 2022, available at: https://www.eia.gov/todayinenergy/detail.php?id=50718#.

⁴⁷ See EIA, Short-Term Energy Outlook, July 12, 2022, available at: https://www.eia.gov/outlooks/steo/.

⁴⁸ See Cheniere Marketing 2022 at 51-54; Sabine Pass 2022 at 53-55; Golden Pass 2022 at 37-38; Magnolia 2022 at 50-51.

⁴⁹ *Id.* (in each of the orders).

The differences since AEO 2017 in projected prices are even more dramatic. As DOE/FECM explained in each of its recent export authorizations, the 2017 AEO projected a Henry Hub price for 2050 of \$6.27 per MMBtu compared to the 2022 AEO projection for that year of \$3.59 per MMBtu, using 2021 dollars in each case. Current EIA data do show higher domestic gas prices in the short-term, forecasting a Henry Hub price of \$5.97 per MMBtu for the second half of 2022 and of \$4.76 in 2023. Strikingly, however, this latest EIA price projection for 2023 – even in the midst of the current, world-wide natural gas crisis – is less than the price for that year, of \$4.97, projected in the 2017 AEO that was considered in the 2018 Study. Thus, the more recent EIA pricing data is even more supportive of LNG exports than the data that DOE/FECM studied in 2018. Thus, the evidence continues to demonstrate that arguments against LNG exports based on misplaced concern about insufficient supplies or domestic natural gas prices are baseless.

Seeking particularly high prices in an effort to bolster its arguments, Sierra Club emphasizes recent natural gas prices at the Algonquin Citygate, near Boston.⁵³ Yet, as well explained in the 2018 Study:

There is often interest in New England natural gas prices because of the frequent price spikes that have been observed there. We expect the average basis differential between New England and Henry Hub to be unaffected by changes in U.S. LNG exports in the long run. Currently, the changes in basis differential between New England and Henry Hub are often caused by changes internal to New

⁵⁰ *Id.* (in each of the orders).

EIA, Short-Term Energy Outlook, July 12, 2022, supra n.47, at 15.

See Table 13 in AEO 2017, available at: https://www.eia.gov/outlooks/aeo/data/browser/#/?id=13-AEO2017&cases=ref2017&sourcekey=0.

Sierra Club Protest at 7-8.

England's natural gas supply and demand balance. When New England natural gas demand exceeds New England natural gas supply, the basis will increase. This increase in basis between New England and Henry Hub can become greater than that for other Eastern regions such as Mid-Atlantic and Henry Hub. The reason for this greater change is the limited natural gas pipeline capacity into New England. New England has no indigenous natural gas production and little storage capacity relative to swings in natural gas demand. Aside from pipeline shipments, the only other supply source to New England is delivered LNG and New England's capacity to receive and store LNG is also limited. These shipments normally originate in foreign countries because the Jones Act makes shipments from the Gulf Coast prohibitively expensive. As a result, New England supply is limited by natural gas pipeline capacity into New England, New England regasification capacity, and regional storage capacity. When local demand exceeds these capacities, natural gas prices in New England will increase because it is no longer possible to deliver additional natural gas supplies into the region. This increase will happen irrespective of whether or not U.S. LNG exports are increasing or decreasing.⁵⁴

Notably, Sierra Club attempts to draw support from a recent study by FERC Staff, suggesting that FERC concluded that the domestic natural gas price increase "was driven largely by competition with demand for LNG exports." Examination of the cited FERC report, however, reveals that this reference too was focused just on Algonquin Citygate prices, stating that "This increase in futures prices at the Algonquin Citygate hub is being driven by a variety of factors; these include, but are not limited to, the winter-peaking New England region's limited natural gas pipeline capacity and competition for global

⁵⁴ 2018 Study, *supra*. n.30 at 54-55, n. 47.

Sierra Club Protest at 6 & n.25 (*citing* FERC, Winter Energy Market and Reliability Assessment (Oct. 21, 2021) at 2, available at: https://www.ferc.gov/sites/default/files/2021-10/Winter%20Assessment%202021-2022%20-%20Report.pdf).

liquefied natural gas (LNG) cargoes in light of rising global LNG prices and demand."56 The unique challenges related to gas supply in New England provide no basis to oppose LNG exports from the Gulf Coast.

Public Citizen attempts to make much of domestic price reactions to the recent outage at the Freeport LNG facility.⁵⁷ The dramatic price response to the sudden and unexpected disappearance of about 2 Bcf/d of natural gas demand, during an extraordinarily tight market, is simple economics. But it reveals nothing about the relevant issue of the expected long-term impact of LNG exports on domestic prices, as abundant U.S. natural gas supplies result in increased production over time as exports increase. Notably, EIA's most recent projections estimate that dry natural gas production will average 96.2 Bcf/d in 2022, up 2.7 Bcf/d from 2021, and then to reach 100 Bcf/d in 2023.⁵⁸ In contrast, EIA projects U.S. gas consumption to decline from 2022 to 2023, from 85.9 Bcf/d to 85.4 Bcf/d.⁵⁹

This growing surplus of U.S. natural gas production compared to consumption continues to support additional LNG exports. Certainly, there can be no doubt that the abundant domestic gas reserves are more than sufficient to supply all domestic needs as well as serve U.S. allies and trade partners with growing supplies of urgently needed

FERC Winter Energy Market and Reliability Assessment (Oct. 21, 2021) at 2, available at: https://www.ferc.gov/sites/default/files/2021-10/Winter%20Assessment%202021-2022%20-%20Report.pdf.

⁵⁷ Public Citizen Protest at 1-2.

⁵⁸ EIA, Short-Term Energy Outlook, July 12, 2022, supra n.47, at 13.

⁵⁹ Id. at 12.

natural gas.⁶⁰ Nothing in the Protests provides any reason to question this conclusion that has been consistently affirmed by DOE/FECM over many years.

E. The Plaquemines Project Uprate Will Be Subject to NEPA Review, and DOE/FE Should Continue Its Existing Policies Regarding Life Cycle GHG Emissions.

Turning to environmental issues, Sierra Club devotes much of its Protest to arguing that the LNG exports generally, and Plaquemines LNG's proposal here in particular, should not be categorically from review under the National Environmental Policy Act ("NEPA").⁶¹ The concern apparently arises from DOE's NEPA rulemaking in late 2020 that revised the scope of its categorical exclusions related LNG exports to non-FTA countries to exclude effects over which the agency has no authority.⁶² Putting aside arguments about the scope, and wisdom, of that rulemaking, the fact is that the FERC is conducting NEPA review of Plaquemines LNG's proposed uprate amendment, and DOE/FECM no doubt will participate in that review as a cooperating agency, just as it has in similar projects over the years.

Plaquemines LNG's proposed amendments, however, involve no new facilities and there will be no land disturbances, supporting the expectation that the actions approving it by both FERC and DOE/FECM are not likely to have any significant adverse effects. Accordingly, the FERC Staff presumably will prepare an Environmental Assessment ("EA") in this case, just as it has done in all the other uprate proceedings. Plaquemines LNG is confident that the EA will confirm – again, just as with all the prior

Regarding evidence of domestic gas supplies and reserves, see Amendment Application at 19-21.

See Sierra Club Protest at 10, 12-16.

See DOE, National Environmental Policy Act Implementing Procedures, Final Rule, 85 Fed. Reg. 78,197 (Dec. 4, 2020)

uprate projects – that approval of a proposal to align the authorized output with the physical capability of previously authorized facilities, with no new construction, will not constitute a major federal action significantly affecting the quality of the human environment.

Such a conclusion by DOE/FECM here will be consistent with its holdings when authorizing, in four separate orders just this year, increased levels of non-FTA exports associated with FERC-approved "uprates" without facility changes at other projects. 63 In each such case, DOE/FECM concluded that the authorization will have no significant impact on the environment, ⁶⁴ based on consideration of the EA prepared by FERC, as well as the following, previous DOE analyses of potential environmental impacts of LNG exports:

- Addendum to Environmental Review Documents Concerning Exports of Natural Gas From the United States, 79 Fed. Reg. 48,132 (Aug. 15, 2014);⁶⁵
- Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States, 79 Fed. Reg. 32,260 (June 4, 2014);⁶⁶
- Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update, 84 Fed. Reg. 49,278 (Sept. 19, 2019), and

⁶³ See supra n.8.

⁶⁴

The Addendum and related documents are available at: https://energy.gov/fe/draft-addendumenvironmental-review-documents-concerning-exports-natural-gas-united-states.

The 2014 Life Cycle Greenhouse Gas Report ("2014 GHG Report"), and related documents, are available at: https://www.energy.gov/fecm/life-cycle-greenhouse-gas-perspective-exporting-liquefiednatural-gas-united-states.

DOE's response to public comments received on that study;⁶⁷ and

• the Marine Transport Technical Support Document prepared by DOE in 2020.⁶⁸

DOE/FECM should consider those same materials and come to the same conclusion regarding the lack of significant impacts here.

In the Amendment Application, Plaquemines LNG explained that exporting natural gas will provide environmental benefits by encouraging the use of more environmentally friendly natural gas for the generation of electricity as opposed to coal, diesel or heavy fuel oil used in foreign countries.⁶⁹ This conclusion is bolstered by statements of the off-take customers that have contracted with Plaquemines LNG emphasizing the benefits of U.S. gas supply to their long-term climate and carbon emissions goals.⁷⁰ For its part, Sierra Club raises a number of issues that could be

Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update—Response to Comments, 85 Fed. Reg. 72 (Jan. 2, 2020). The "2019 GHG Update" and related documents are available at: https://fossil.energy.gov/app/docketindex/docket/index/21.

U.S. Dep't of Energy, National Environmental Policy Act Implementing Procedures, Final Rule, 85 Fed. Reg. 78,197, 78,198 n.16 (Dec. 4, 2020) (*citing* U.S. Dep't of Energy, Technical Support Document, Notice of Final Rulemaking, National Environmental Policy Act Implementing Procedures (10 C.F.R. Part 1021) (Nov. 2020)). In this rulemaking, DOE conducted a detailed review of the potential effects associated with marine transport of LNG, considering the documents identified in the accompanying Marine Transport Technical Support Document. On the basis of those documents, DOE concluded that "the transport of natural gas by marine vessels adhering to applicable maritime safety regulations and established shipping methods and safety standards normally does not pose the potential for significant environmental impacts." *Id.* at 78,202.

⁶⁹ See Amendment Application at 27-31.

See Press Release, Venture Global LNG and PGNiG Finalize Expansion of LNG Partnership Venture Global LNG and PGNiG Finalize Expansion of LNG Partnership, Sept. 2, 2021, available at: https://venturegloballng.com/press/venture-global-lng-and-pgnig-finalize-expansion-of-lng-partnership/; Press Release, Venture Global and Sinopec Announce Historic LNG Sales and Purchase Agreements, Nov. 4, 2021, available at: https://venturegloballng.com/press/venture-globallng.com/press/venture-global-lng-and-cnooc-gas-power-announce-lng-sales-and-purchase-agreements/; Press Release, Venture Global LNG and Petronas Announce LNG Sales and Purchase Agreements, May 11, 2022, available at: https://venturegloballng.com/press/venture-global-and-petronas-announce-sales-and-purchase-agreement/.

considered in the EA to be prepared here, including potential sea level rise, air emissions, and environmental justice matters,⁷¹ and Plaquemines LNG sees no reason to debate those matters in this answer.

In contrast, Sierra Club's arguments regarding GHG issues⁷² warrant a brief response. In the Amendment Application, Plaquemines LNG discussed DOE's prior studies of Life Cycle GHG emissions cited above, and how they support the conclusion that LNG exports are consistent with the public interest.⁷³ The Sierra Club criticized DOE's 2019 GHG Update when it was released (much as it does in its Protest here), and DOE/FECM generally rejected that criticism.⁷⁴

Furthermore, DOE/FECM just revisited this issue in its very recent export authorizations, and generally reaffirmed the approach and conclusions of its prior GHG studies.⁷⁵ The bottom-line is that DOE/FECM concluded there, as it has consistently in numerous orders over many years, that an increase in exports of U.S. LNG has not been shown to increase GHG emissions in any material or predictable way.⁷⁶ Nothing submitted by the protestants here provides any basis to alter that conclusion.

⁷¹ See Sierra Club Protest at 20-26.

⁷² *Id.* at 17-20.

See Application at 32-34 (discussing 2014 GHG Study and 2019 GHG Update, cited *supra* n.66 & n.67).

See DOE, Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update—Responses to Comments, 85 Fed. Reg. 72 at 81-86 (Jan. 2, 2020).

⁷⁵ See Cheniere Marketing 2022 at 20-22, 58-59; Sabine Pass 2022 at 20-22, 59-61; Golden Pass 2022 at 43-45; Magnolia 2022 at 56-58.

See Cheniere Marketing 2022 at 59; Sabine Pass 2022 at 60; Golden Pass 2022 at 44; Magnolia 2022 at 58.

III. Conclusion

Wherefore, for all the foregoing reasons, Plaquemines LNG requests that DOE/FECM accept this answer to the filed Protests in this proceeding and, when acting on the Amendment Application, reject the arguments by the protesting parties and recognize that authorizing the increased amount of LNG exports proposed by Plaquemines LNG is unquestionably not inconsistent with the public interest.

Respectfully submitted,

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Dated: July 26, 2022

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the foregoing document upon each person designated on the official service list compiled for this proceeding.

Dated at Washington, D.C., this 26th day of July, 2022.

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