

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Corpus Christi Liquefaction, LLC) FECM Docket No. 23-46-LNG
CCL Midscale 8-9, LLC)
Cheniere Marketing, LLC)
)

Motion to Intervene and Protest of Sierra Club

Corpus Christi Liquefaction, LLC, CCL Midscale 8-9, LLC, and Cheniere Marketing, LLC (collectively, “Cheniere”) seek approval to export approximately 170 billion cubic feet of natural gas annually, or approximately 0.47 billion cubic feet per day.¹ Sierra Club hereby moves to intervene in this docket, pursuant to 10 C.F.R. § 590.303(b). Sierra Club concurrently protests this application, pursuant to 10 C.F.R. § 590.304, as inconsistent with the public interest.²

LNG exports are harming Americans *now*. It is well established that there is a direct, positive correlation between LNG exports and domestic natural gas prices. After the catastrophic June 8, 2022 explosion at the Freeport LNG facility took the facility offline, domestic natural gas prices fell 17%.³ The Energy Information Administration, for its part, has repeatedly recognized this phenomenon.⁴ So too

¹ Cheniere Application at 1.

² *See* 15 U.S.C. § 717b(a).

³ Reuters, U.S. natgas plunge 17% as Freeport LNG outage leaves more fuel for storage (Jun. 30, 2022), *available at* <https://www.reuters.com/business/energy/us-natgas-down-3-freeport-lng-outage-leaves-more-fuel-storage-2022-06-30/> (attached).

⁴ U.S. EIA, Winter Fuels Outlook (Oct. 2021) at 1, 4, *available at* https://www.eia.gov/outlooks/steo/special/winter/2021_Winter_Fuels.pdf (attached) (predicting 30% increase in home heating costs for U.S. homes that heat primarily with natural gas because of increased exports); U.S. EIA, Winter Fuels Outlook (Oct. 2022) at 1-2, *available at* https://www.eia.gov/outlooks/steo/special/winter/2022_Winter_Fuels.pdf (attached)

has FERC and other industry observers.⁵ Cheniere seeks to export even more U.S. natural gas—beginning in 2031⁶—which will exacerbate this problem. At a minimum, recent trends call into question the continuing validity of the analyses DOE has relied upon in approving prior export applications, and DOE cannot approve Cheniere’s application without revisiting these analyses. Additionally, DOE must consider whether current winter gas price increases warrant imposing conditions on Cheniere’s application, such as allowing exports only in other seasons outside of peak demand.

LNG exports will also harm Americans *for generations*. Cheniere seeks authorization for LNG exports *through 2050*.⁷ But well before 2050, the world must have fully transitioned to net-zero emissions, as the U.S.—and the world—affirmed in Glasgow.⁸ There is no place for LNG in that future. Limiting global warming to 1.5 °C “requires rapid, deep and sustained reductions in global greenhouse gas emissions,” including intermediate steps such as “reducing global carbon dioxide emissions by 45 per cent by 2030.”⁹ Global LNG export volumes must decline below

(predicting 28% in home heating costs for U.S. homes that heat primarily with natural gas because of increased exports).

⁵ FERC, Winter Energy Market and Reliability Assessment (Oct. 25, 2022) at 2, *available at* <https://www.ferc.gov/media/report-2022-2023-winter-assessment> (attached); FERC, Winter Energy Market and Reliability Assessment (Oct. 21, 2021) at 2, *available at* <https://ferc.gov/sites/default/files/2021-10/Winter%20Assessment%202021-2022%20-%20Report.pdf> (attached); *accord id. at 11*. See also Clark Williams-Derry, IEEFA U.S.: Booming U.S. natural gas exports fuel high prices, IEEFA.ORG (Nov. 4, 2021), <https://ieefa.org/ieefa-u-s-declining-demand-lower-supply-dont-explain-rapidly-rising-gas-prices/> (attached).

⁶ Cheniere Application at 6 n.12.

⁷ *Id.* at 2.

⁸ U.N. Framework Convention on Climate Change Secretariat, Glasgow Climate Pact at ¶17, *available at* https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf (attached).

⁹ *Id.*

present levels in the near future: as the International Energy Agency affirmed, further expansion of LNG export facilities cannot be part of the path to net-zero emissions.¹⁰

I. Intervention

DOE's rules do not articulate any particular standard for timely intervention, and accordingly, intervention should be granted liberally. DOE merely requires would-be-intervenors to set out the "facts upon which [their] claim of interest is based" and "the position taken by the movant." 10 C.F.R. § 590.303(b)-(c). As explained in the following section, Sierra Club's position is that the application should be denied or, in the alternative, heavily conditioned. Sierra Club's interests are based on the impact the proposed exports will have on its members and mission.

The requested export volumes will harm Sierra Club and its members by increasing the prices they pay for energy, including both gas and electricity. As DOE and the Energy Information Administration have previously explained, each marginal increase in export volumes is also expected to further increase domestic energy prices.

The proposed exports will further harm Sierra Club members by increasing gas production and associated air pollution, including (but not limited to) emission of greenhouse gases and ozone precursors. As DOE has recognized, increasing LNG exports will increase gas production,¹¹ and increasing gas production increases

¹⁰ International Energy Agency, Net Zero by 2050, at 102 (May 2021), *available at* https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf (attached).

¹¹ *See, e.g.*, U.S. EIA, Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets (Oct. 2014) at 12, *available at* <https://www.eia.gov/analysis/requests/fe/pdf/lng.pdf> (explaining that "[n]atural gas markets in the United States balance in response to increased LNG exports mainly through increased natural gas production," and "[a]cross the different export

ozone pollution, including risking creation of new or expanded ozone non-attainment areas or exacerbating existing non-attainment.¹² Cheniere explained that the Project will be supplied by pipeline from the Agua Dulce gas hub, providing access “to natural gas supplies from almost any point on the U.S. interstate pipeline system.”¹³ This, of course, includes gas from the Eagle Ford shale in South Texas and the Permian Basin in West Texas and New Mexico. Sierra Club’s 24,454 members in Texas,¹⁴ including 229 members in Nueces County and 34 members in San Patricio County, are already subject to harmful levels of ozone, including ozone caused by oil and gas production. Additionally, Sierra Club’s members outside of Texas are similarly subject to harmful levels of ozone, including ozone caused by oil and gas production. These members will be adversely impacted if the Project is placed into service.

The Project will also increase shipping traffic beyond levels that would otherwise occur.¹⁵ This additional vessel or tanker traffic will increase air pollution, including carbon monoxide and ozone-forming nitrogen oxides, in an area that exceeded the National Ambient Air Quality Standard (“NAAQS”) for ozone as recently in 2021 and has been perilously close to the threshold in other years,

scenarios and baselines, higher natural gas production satisfies about 61% to 84% of the increase in natural gas demand from LNG exports,” with “about three-quarters of this increased production [coming] from shale sources.”) (attached).

¹² U.S. DOE, Final Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States (Aug. 2014) at 27-32, *available at* <https://www.energy.gov/sites/prod/files/2014/08/f18/Addendum.pdf>.

¹³ Cheniere Application at 7.

¹⁴ As of May 2023.

¹⁵ Cheniere FERC Application at 5-6, Accession 20230330-5209; *See Sierra Club v. FERC*, 827 F.3d 59, 66-67 (D.C. Cir. 2016) (“*Sabine Pass*”) (holding that increase in terminal export volumes would cause Article III injury because it would increase tanker traffic).

including 2022.¹⁶ This would harm Sierra Club's members residing in the project area. Increased ship traffic will also harm wildlife that Sierra Club's members enjoy viewing, *etc.*, including the threatened giant manta ray,¹⁷ threatened oceanic whitetip shark,¹⁸ and endangered Rice's whale (formerly designated as the Gulf of Mexico population of the Bryde's whale).¹⁹ And increased ship traffic would cause adverse visual impacts in the project area, reducing Sierra Club's members enjoyment of the aesthetics of the project area.

The Project will also have direct air emissions of several criteria and hazardous air pollutants, including, again, ozone precursors. This will injure Sierra Club's members in the project area.

Finally, the Project will impact Sierra Club's members because it will emit greenhouse gases at the export terminal and upstream and downstream of the export terminal. The impacts from climate change are already harming Sierra Club's members in numerous ways. Coastal property owners risk losing property to sea level rise. Extreme weather events, including flooding and heat waves, impact members' health, recreation, and livelihoods. Increased frequency and severity of wildfires emits smoke that impacts members' health, harms ecosystems members depend upon, and threatens members' homes. Proposals, such as this one, that encourage long-term use of carbon-intensive fossil fuels will increase and prolong greenhouse gas emissions, increasing the severity of climate change and thus of these harms.

¹⁶ Resource Report 9, at 9-3 – 9-4, Accession 20230330-5209.

¹⁷ Final Rule to List the Giant Manta Ray as Threatened Under the Endangered Species Act, 83 Fed. Reg. 2,916 (Jan. 22, 2018).

¹⁸ Listing the Oceanic Whitetip Shark as Threatened Under the Endangered Species Act, 83 Fed. Reg. 4,153 (Jan. 30, 2018).

¹⁹ Technical Corrections for the Bryde's Whale (Gulf of Mexico Subspecies), 86 Fed. Reg. 47,022 (Aug. 23, 2021).

In summary, the Project would harm Sierra Club and its members in numerous ways. Sierra Club accordingly contends that the application should be denied or conditioned, as further described in the following protest.

Pursuant to 10 C.F.R. § 590.303(d), Sierra Club identifies the following persons for the official service list:

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II. Protest

This application should be denied because it is contrary to the public interest.²⁰

As DOE explained when reviewing a previous application from Cheniere, “when reviewing an application for export authorization,” DOE evaluates “economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others.”²¹ Here, all of these factors weigh against the application.

²⁰ 15 U.S.C. § 717b(a).

²¹ DOE/FE Order No. 4490 (Corpus Christi Liquefaction Stage III, LLC), at 22 (Feb. 10, 2020), *available at* <https://www.energy.gov/sites/prod/files/2020/02/f71/ord4490.pdf>.

A. Domestic Energy Prices and Supply

DOE has historically given particular emphasis to “the domestic need for the natural gas proposed to be exported” and “whether the proposed exports pose a threat to the security of domestic natural gas supplies.”²² As recent data shows, exports are increasingly linking domestic gas prices to prices in the global market. These increases harm American households and energy intensive industry.

Exports are increasing domestic gas prices, as recognized by FERC, the Wall Street Journal,²³ S&P Global Platts Analytics,²⁴ the Institute for Energy Economics and Financial Analysis, and others. FERC, for example, has identified LNG exports as the “primar[y]” source of the additional demand that has driven recent gas price increases.²⁵ And these price increases are severe. In 2021, benchmark futures prices at the Henry Hub increased 103% relative to the previous winter,²⁶ with larger increases elsewhere, including more than quadrupling of the price at the Algonquin Citygate outside Boston,²⁷ as illustrated in this chart from FERC:²⁸

²² *Id.* at 10.

²³ Collin Eaton & Katherine Blunt, Natural-Gas Exports Lift Prices for U.S. Utilities Ahead of Winter, WALL ST. J., Nov. 7, 2021, <https://www.wsj.com/articles/natural-gas-exports-lift-prices-for-u-s-utilities-ahead-of-winter-11636281000>.

²⁴ Kelsey Hallahan, Henry Hub could reach \$12-\$14 this winter as capital discipline limits supply growth: Platts Analytics, S&P GLOBAL PLATTS, Oct. 14, 2021, <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/101421-henry-hub-could-reach-12-14-this-winter-as-capital-discipline-limits-supply-growth-platts-analytics>.

²⁵ FERC, 2021-2022 Winter Energy Market and Reliability Report, *supra* note 5 at 2; *accord* FERC 2022-2023 Winter Energy Market and Reliability Report, *supra* note 5, at 2.

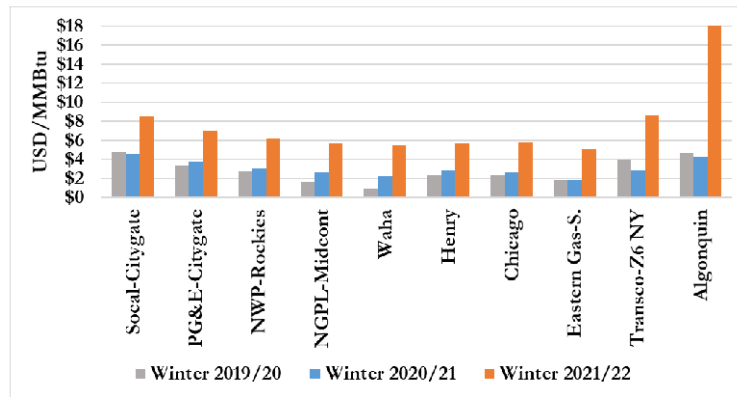
²⁶ FERC, 2021-2022 Winter Energy Market and Reliability Report, *supra* note 5 at 2, 11.

²⁷ *Id.* at 12.

²⁸ *Id.* at 10.

Winter Futures Prices Increased at Nearly Every Major U.S. Trading Hub

Average U.S. Natural Gas Futures Prices Across Major Hubs for November - February

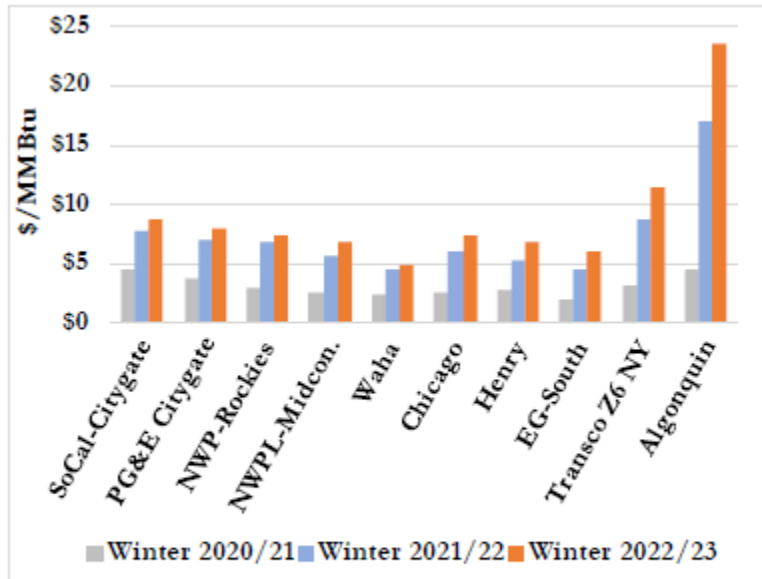


Source: InterContinental Exchange Inc

The following year, the same futures increased *again* across the same major hubs.²⁹ This included an additional 30% increase at the Henry Hub.³⁰

²⁹ FERC, 2022-2023 Winter Energy Market and Reliability Report, *supra* note 5 at 5.

³⁰ *Id.*



Source: InterContinental Exchange, Inc.

Note: Winter 2022/23 futures prices are as of September 14, 2022. Prior winters are settled prices.

While there has been a recent dip in natural gas prices,³¹ this does not undermine the general principle that additional exports increase domestic gas prices. There is no reason to think that this reduction in domestic prices is permanent (indeed, as noted, domestic prices were just remarkably high). And there is no reason to think that the Project will not have a negative impact on domestic prices if it is placed into service.

These price increases will harm both households and industrial energy consumers. Predictably, where domestic natural gas prices are higher, domestic heating costs in homes that use gas for heat are also higher.³² The Industrial Energy Consumers of America, which represents manufacturers that use at least 1 million MMBtu of energy per year,³³ has repeatedly written to DOE about how

³¹ See Henry Hub Natural Gas Spot Price, EIA.GOV, <https://www.eia.gov/dnav/ng/hist/rngwhhdm.htm> (last visited July 6, 2023) (attached).

³² See *supra* note 4.

³³ “Membership Info,” IECA, <https://www.ieca-us.com/membership-info/> (last

export-driven gas prices increases are harming domestic industry.³⁴ From an economic perspective, LNG exports are simply making most Americans worse off: all Americans must pay energy bills, but few own shares (even indirectly, through pension plans and the like) in the gas companies that are benefiting from high gas prices and LNG sales.³⁵ But DOE is charged with protecting the “public” interest.³⁶ That is, the interest “of ... all or most of the people” in the United States.³⁷ DOE has previously recognized that “the distributional consequences of an authorizing decision” may be so negative as to demonstrate inconsistency with the public interest despite “net positive benefits to the U.S. economy as a whole.”³⁸ Accordingly, unless DOE addresses distributional concerns, DOE will have failed to consider an important part of the problem. But to date, DOE has never grappled with the distributional impacts of LNG exports: DOE has acknowledged that LNG exports have some positive and some negative economic impacts,³⁹ but DOE has not

accessed Dec. 7, 2021).

³⁴ See, e.g., Letter from Paul N. Cicio to Jennifer Granholm (Nov. 22, 2021), available at https://www.ieca-us.com/wp-content/uploads/11.22.21_LNG_-Why-a-Safety-Valve-is-Needed_FINAL.pdf.

³⁵ Synapse Energy Economics, Inc., *Will LNG Exports Benefit the United States Economy?* (Jan. 23, 2013) at 9, available at <https://www.energy.gov/sites/default/files/2022-07/11.%20Synapse%2C%20LNG%20Exports%20Economic%20Report.pdf> (attached) (Initially submitted as Exhibit 5 to Comments of Sierra Club *et al.* on the 2012 NERA macroeconomic report).

³⁶ 15 U.S.C. § 717b(a).

³⁷ *Public*, Merriam Webster Unabridged Dictionary, available at <https://www.merriam-webster.com/dictionary/public> (last visited Jul. 3, 2023).

³⁸ DOE/FE Order 3638-A (Corpus Christi) at 45 (May 26, 2016), available at https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2012/applications/12-97-LNG_CMI_Corpus_Rehearing_May_26.pdf

³⁹ See, e.g., NERA Economic Consulting, *Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports* (June 7, 2018) at 19, 21, 64, 67, available at <https://cms.doe.gov/sites/prod/files/2018/12/f58/2018%20Study.pdf>.

addressed the fact that those who suffer the harms are not the same as those who enjoy the benefits, or that the former are more numerous and generally less advantaged than the latter. In particular, research shows that low-income, Black, Hispanic, and Native American households all face dramatically higher energy burdens—spending a greater portion of their income on energy bills—than the average household.⁴⁰

It is especially important that DOE evaluate distributional consequences here because the Project will certainly impact environmental justice communities. The City of Gregory, the closest city to the Project, is 89% Hispanic/Latino⁴¹ and 50% is considered low-income.⁴² Corpus Christi, the nearest major Texas city, is 64% Hispanic/Latino⁴³ and 36% low-income.⁴⁴ Similarly, the population of San Patricio County, where the project site is located, is 58% Hispanic/Latino⁴⁵ and 38%

⁴⁰ American Council for an Energy-Efficient Economy, *How High are Household Energy Burdens?* (Sept. 2020), available at <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf> (attached). Accord Eva Lyubich, *The Race Gap in Residential Energy Expenditures* (June 2020), available at <https://haas.berkeley.edu/wp-content/uploads/WP306.pdf> (attached).

⁴¹ US EPA, EJSCREEN ACS Summary Report: Gregory, Texas (attached) (initially filed with scoping comments from Sierra Club *et al.* in PF22-10, Accession 20221212-5228).

⁴² US EPA, EJScreen Report (Version 2.1): Gregory, Texas (attached) (initially filed with scoping comments from Sierra Club *et al.* in PF22-10, Accession 20221212-5228). A household is considered “low income” when the household income is less than or equal to twice the federal “poverty level.” US EPA, Overview of Socioeconomic Indicators in EJScreen, available at <https://www.epa.gov/ejscreen/overview-socioeconomic-indicators-ejscreen> (last accessed July 3, 2023) (attached).

⁴³ US EPA, EJSCREEN ACS Summary Report: Corpus Christi, Texas (attached) (initially filed with scoping comments from Sierra Club *et al.* in PF22-10, Accession 20221212-5228).

⁴⁴ US EPA, EJSCREEN Report (Version 2.1): Corpus Christi, Texas (attached) (initially filed with scoping comments from Sierra Club *et al.* in PF22-10, Accession 20221212-5228).

⁴⁵ US EPA, EJSCREEN ACS Summary Report: San Patricio County, Texas

low-income.⁴⁶ By comparison, only 40.2% of the Texas’ population is Hispanic/Latino⁴⁷ and only 33% is low-income.⁴⁸ Thus, the distributional and equity impacts of the Project require careful consideration here.

For its part, Cheniere entirely ignores all of these issues. Cheniere’s application is silent on the Project’s impacts to domestic gas prices. Cheniere argues that its application is consistent with the public interest because U.S. gas reserves are sufficient to meet both domestic needs and exports.⁴⁹ But the issue isn’t merely whether there is enough recoverable gas to supply all users—it’s the price at which that gas could be, and is, made available. Cheniere does argue, based on a 2018 study, that exports “lead[] to only small increases in U.S. natural gas prices.”⁵⁰ But, as explained above, developments since 2018 indicate that the impact of U.S. LNG exports on U.S. domestic natural gas prices are significant.⁵¹ Perhaps the most salient example of this phenomenon is what happened to domestic natural gas prices after the explosion at the Freeport LNG export facility. After the catastrophic June 8, 2022 explosion at the Freeport LNG facility took the facility offline, domestic natural gas prices fell 17%.⁵² This relationship was recently confirmed by the U.S. Energy Information Administration, which concluded that “higher LNG

(attached) (initially filed with scoping comments from Sierra Club *et al.* in PF22-10, Accession 20221212-5228).

⁴⁶ US EPA, EJSCREEN Report (Version 2.1): San Patricio County, Texas (attached) initially filed with scoping comments from Sierra Club *et al.* in PF22-10, Accession 20221212-5228).

⁴⁷ ACS Summary Report: San Patricio County, Texas.

⁴⁸ EJSCREEN Report: San Patricio County, Texas.

⁴⁹ Cheniere Application at 9-11.

⁵⁰ *Id.* at 11.

⁵¹ *See supra* notes 23-31.

⁵² U.S. natgas plunge 17% as Freeport LNG outage leaves more fuel for storage, *supra* note 3.

exports results in upward pressure on U.S. natural gas prices and that lower U.S. LNG exports results in downward pressure.”⁵³

DOE has previously relied on modeling of how energy markets will balance in response to increased LNG exports, and on studies of the macroeconomic effects of such balancing. The impact that exports have had on domestic gas prices calls those prior analyses into question, and DOE cannot approve additional exports without carefully examining the continuing validity of those analyses. We understand that DOE and the EIA is currently revisiting the 2012 and 2014 LNG export studies.⁵⁴ At a minimum, DOE should not approve further export applications until this study is complete.

DOE must be particularly cautious given DOE’s refusal, to date, to exercise supervisory authority over already-approved exports. Although DOE retains authority to amend and/or rescind existing export authorizations,⁵⁵ DOE has stated its reluctance to exercise such authority.⁵⁶ But if export applications are, in effect, a one-way ratchet on export volumes, DOE cannot issue such authorizations carelessly.

The Natural Gas Act’s “principle aim[s]” are “encouraging the orderly development of plentiful supplies of natural gas at reasonable prices and protecting consumers against exploitation at the hands of natural gas companies,” with the

⁵³ U.S. Energy Info. Admin., *AEO2023 Issues in Focus: Effects of Liquefied Natural Gas Exports on the U.S. Natural Gas Market*, at 4 (May 2023), available at https://www.eia.gov/outlooks/aeo/IIF_LNG/pdf/LNG_Issue_in_Focus.pdf (attached).

⁵⁴ <https://www.energy.senate.gov/hearings/2021/11/full-committee-hearing-on-domestic-and-international-energy-price-trends> (testimony of Stephen Nalley at 47:50 to 48:15)

⁵⁵ See 15 U.S.C. § 717o.

⁵⁶ See Policy Statement Regarding Long-Term Authorizations to Export Natural Gas to Non-Free Trade Agreement Countries, 83 Fed. Reg. 28,841 (June 21, 2018). Although DOE has not exercised this authority yet, DOE *should* carefully consider doing so, given the severe impact already-authorized exports are having on domestic gas prices.

“subsidiary purposes” of addressing “conservation, environmental, and antitrust issues.”⁵⁷ At present, LNG exports are not achieving these purposes. DOE’s uniform approval of all export applications has not protected consumers from exploitation at the hands of gas companies, and LNG exports are not leading to reasonable gas prices. Accordingly, even putting aside the numerous and severe environmental impacts of increased LNG exports, Cheniere’s application is inconsistent with the public interest and should be denied.

B. Environmental Impacts

The environmental impacts of Cheniere’s proposed export increase also weigh against the public interest. These include impacts occurring across the entire LNG lifecycle, which both the Natural Gas Act and NEPA require DOE to consider. DOE must reject Cheniere’s handwaving of the Project’s serious environmental impacts.⁵⁸ While FERC is the lead agency for NEPA review of the Project and DOE will act as a cooperating agency, FERC’s authority does not preempt or modify DOE’s obligations under NEPA or the Natural Gas Act.⁵⁹ Thus, DOE must ensure that the Project’s environmental impacts are adequately considered in reaching its decision here. Additionally, DOE must revisit its deeply flawed analysis of the climate impacts of LNG exports.

⁵⁷ *Minisink Residents for Env’tl. Pres. & Safety v. FERC*, 762 F.3d 97, 101 (D.C. Cir. 2014) (cleaned up).

⁵⁸ Cheniere Application at 17-18.

⁵⁹ *Sierra Club v. FERC*, 827 F.3d 36, 41-42 (D.C. Cir. 2016) (“Freeport”); *Sierra Club v. U.S. Forest Serv.*, 897 F.3d 582, 590 (4th Cir. 2018), *reh’g granted on other grounds in part*, 739 F. App’x 185 (4th Cir. 2018); *see also In re Lively*, 717 F.3d 406, 410 (5th Cir. 2013) (quoting *Nat’l Ass’n of Homebuilders v. Defs. of Wildlife*, 551 U.S. 644, 662 (2007)) (“Repeals by implication are disfavored and will not be presumed unless the legislature’s intent is ‘clear and manifest.’”).

1. DOE Must Consider the Entire LNG Lifecycle

Both the Natural Gas Act and NEPA require DOE to take a hard look at environmental impacts occurring throughout the entire LNG lifecycle, and to consider such impacts in the public interest determination.

Under the Natural Gas Act, DOE itself has recognized that a key consideration in its public interest determinations is the effect increased export volumes will have on gas production and use. DOE therefore must consider the environmental impacts of such effects. As the D.C. Circuit has affirmed, the Natural Gas Act's public interest standards provide authority and obligation to consider indirect effects on gas production and use, and the environmental consequences thereof, as part of the public interest inquiry.⁶⁰

Similarly, NEPA's statutory text requires agencies to consider the "effects" of proposed actions.⁶¹ This requirement is not limited to only some "effects," and the statute demands a broad perspective, including consideration of the "worldwide and long-range character of environmental problems."⁶² Accordingly, cases have interpreted this language to mean that the statute itself requires consideration of both direct and indirect effects.⁶³ The plain meaning of "effects" includes indirect but foreseeable or intended consequences, such as effects proximately caused by the

⁶⁰ See *Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017) ("*Sabal Trail*") (holding that indirect impacts, including indirect climate impacts, must be evaluated as part of public interest inquiry under Natural Gas Act, and that for export approvals under section 3, DOE has exclusive authority to consider these issues).

⁶¹ 42 U.S.C. § 4332(2)(F).

⁶² *Id.*

⁶³ *City of Davis v. Coleman*, 521 F.2d 661, 676–77 (9th Cir. 1975); see also *Kleppe v. Sierra Club*, 427 U.S. 390, 409-10 (1976) (noting that Congress's mandate that agencies use "all practicable means" to "assure consideration of the environmental impact of their actions in decisionmaking," requires consideration of cumulative effects) (citations omitted).

action.⁶⁴ And where, as here, Cheniere has identified stimulating U.S. gas production⁶⁵ and overseas gas use as purposes of the Freeport export project,⁶⁶ these are plainly “effects” of the authorization of increased exports.

Additionally, the NEPA regulations explicitly require consideration of “indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”⁶⁷

In summary, both the Natural Gas Act and NEPA require DOE to evaluate and weigh environmental impacts occurring through the LNG life cycle.

2. The Proposed Exports Cannot be Categorically Excluded from NEPA Review

DOE cannot rely on categorical exclusion B5.7.⁶⁸ Adoption of this categorical exclusion was arbitrary and unlawful. Alternatively, this proposal lacks the integral elements of an exempt project and presents extraordinary circumstances, precluding reliance on a categorical exclusion here.

⁶⁴ Courts interpreting NEPA have occasionally analogized to the tort doctrine of proximate cause. *E.g.*, *Sierra Club v. FERC*, 827 F.3d 36, 47 (D.C. Cir. 2016) (“*Freeport I*”) (quoting *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004)). There are two problems with this. One, proximate cause is itself a flawed concept: the authors of the Restatement of Torts argue that the concept should be excised even from the field of tort law. Restatement (Third) of Torts: Phys. & Emot. Harm 6 Spec. Note (2010). Two, the purpose of proximate cause—to assign legal responsibility and blame for events that have already occurred—is fundamentally different from the purpose of NEPA review, which is to inform the public and decisionmakers of effects that have not yet occurred, and which can still be avoided. Under NEPA, identifying an adverse effect is important, and can and should inform decisionmaking, even if that effect could, in the tort sense, be said to be someone else’s fault.

⁶⁵ Cheniere Application at 10.

⁶⁶ *Id.* at 14-17.

⁶⁷ 40 C.F.R. § 1508.1(g)(2).

⁶⁸ *See* 10 C.F.R. pt. 1021 pt. D app’x B, B5.7.

a) The 2020 Categorical Exclusion Is Invalid

Adoption of the 2020 categorical exclusion was arbitrary, capricious, and contrary to law. Most egregiously, in promulgating the 2020 exclusion, DOE improperly excluded from NEPA review *all* impacts occurring upstream of the point of export, based on a basic and fundamental legal error. The Notice of Proposed Rulemaking argued that DOE need not consider “environmental impacts resulting from actions occurring [before] the point of export” because “the agency has no authority to prevent” these impacts.⁶⁹ For this premise, DOE relied on the D.C. Circuit’s decision in *Freeport I*. But DOE’s reliance on *Freeport I* is misplaced because DOE’s interpretation of *Freeport I* is the exact opposite of *Freeport I*’s explicit and central holding. *Freeport I* held that *FERC* had no authority prevent these impacts, specifically because *DOE* had retained “exclusive” authority to do so.⁷⁰ *FERC* had “no authority” to consider the impacts of export-induced gas production because “the Natural Gas Act places export decisions squarely and exclusively within the Department of Energy’s wheelhouse.”⁷¹ Because DOE *has* such authority, the categorical exclusion was adopted unlawfully, cannot be relied upon here, and provides no evidence to suggest that all environmental effects occurring before the point of exports will be insignificant.

Nor can upstream impacts be dismissed as unforeseeable. DOE has in fact foreseen them, with EIA modeling, an environmental addendum, and a lifecycle

⁶⁹ 85 Fed. Reg. at 25,341 (citing *Sierra Club v. FERC*, 827 F.3d 36 (D.C. Cir. 2016) (“*Freeport I*”); accord Final Rule, 85 Fed. Reg. 78,197, 78,198.

⁷⁰ 827 F.3d at 40-41, 46.

⁷¹ *Id.* at 46. In finalizing the 2020 Categorical Exclusion, DOE also erred in asserting that its approval of exports is “not interdependent” with *FERC*’s approval of export infrastructure. 85 Fed. Reg. 78,197, 78,199. DOE’s export authorization cannot be effectuated without *FERC* approval of export infrastructure, and vice versa; even if *FERC* infrastructure could proceed solely on the basis of FTA export authorization, neither this project nor any other major project in fact seeks to do so.

report that extensively, although at times incorrectly, discuss these impacts. In these, DOE has broadly conceded that the climate impacts of upstream effects are foreseeable. And DOE's Environmental Addendum acknowledged that increased gas production "may" increase ozone levels and "may" frustrate some areas' efforts to reduce pollution to safe levels.⁷² But as DOE has acknowledged, it has not made any determination as to the likelihood or significance of such impacts—the Addendum made no "attempt to identify or characterize the incremental environmental impacts that would result from LNG exports" whatsoever.⁷³ Insofar as DOE contends that these impacts can be difficult to foresee, that affirms, rather than refutes, the need for case-by-case analysis.⁷⁴ Even if DOE determines that upstream impacts can only be discussed generally, in something like the Environmental Addendum, this does not entail the conclusion that the impacts are insignificant. Similarly, a conclusion that an agency can meet its NEPA obligations by tiering off an existing document (which may need to be periodically revised as facts and scientific understanding change) is different than the conclusion that NEPA review simply is not required.

The 2020 Categorical Exclusion's treatment of downstream impacts was also arbitrary. As with upstream impacts, DOE mistakenly asserted that some downstream impacts (downstream impacts relating to regasification and use of exported gas) were entirely outside the scope of NEPA analysis.⁷⁵ This is again incorrect: DOE has authority to consider these impacts when making its public

⁷² Addendum, *supra* note 12, at 27-28.

⁷³ DOE/FE Order No. 3638 (Corpus Christi LNG), at 193-194 (May 12, 2015), *available at* https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2012/applications/ord3638.pdf.

⁷⁴ *See also Cal. Wilderness Coal. v. DOE*, 631 F.3d 1072, 1097 (9th Cir. 2011) (rejecting DOE argument that environmental impacts of designation of electric transmission corridors were too speculative to require NEPA analysis).

⁷⁵ 85 Fed. Reg. at 78,202.

interest determination, and DOE has not shown that these impacts are so unforeseeable that they cannot be meaningfully discussed at all. Indeed, DOE itself has refuted this argument by discussing these impacts in the life cycle analysis.

For other impacts, relating to marine vessel traffic, the preamble to the 2020 final rule arbitrarily dismissed these impacts as *de minimus*, claiming that because LNG export has historically constituted only a small share of overall U.S. shipping traffic, the effects of future LNG export approvals could be ignored.⁷⁶ This is legally and factually incorrect. LNG exports are rapidly expanding, and this expansion depends upon and is caused by authorizations like the one Cheniere has requested here. Moreover, noting that LNG traffic is a small share of the total does not demonstrate that the impact of LNG traffic in particular is insignificant: a small portion of a large problem can itself constitute a significant impact. And even if such a fractional approach could be justified, it would require a different denominator: the number of ships in the habitat of the species at issue. LNG traffic—now and in the future—constitutes a larger and growing share of traffic *in the Gulf of Mexico*, where many of the species that will be impacted by Cheniere’s exports, including multiple listed species, live. Ship traffic to the West and East Coasts inflates the denominator but is irrelevant to many of these species.

b) Both the “Integral Elements” and “Extraordinary Circumstances” Requirements of DOE’s Regulations Preclude Use of a Categorical Exclusion Here.

DOE cannot invoke a categorical exclusion without determining that the proposed action has the “integral elements” of excluded actions as defined in Appendix B to 10 C.F.R. Part 2021 Subpart D. DOE must also determine whether there are “extraordinary circumstances that may affect the significance of the environmental effects of the proposal.”⁷⁷ These requirements have some conceptual

⁷⁶ The proposed rule ignored wildlife impacts entirely.

⁷⁷ 10 C.F.R. § 1021.410(b). Another paragraph requires a determination that “the proposal fits within a class of actions that is listed in Appendix ... B” 10 C.F.R. §

overlap but are distinct and must be separately considered.⁷⁸ Here, the application violates both requirements.

i. Integral Elements

The proposal does not satisfy integral element 1, because it “threaten[s] a violation of applicable statutory [or] regulatory ... requirements for environment, safety, and health, or similar requirements of ... Executive Orders.”⁷⁹ This integral element is missing whenever a proposal *threatens* a violation; if there a possibility of such a violation, a project-specific NEPA analysis is required to evaluate that risk.

Here, the Project threatens violations of air quality standards and related requirements because the Project would emit ozone precursors, in an area near non-attainment for ozone. Cheniere does not address this in its application.

Increased exports also threaten a violation of Executive Order 14,008, Tackling the Climate Crisis at Home and Abroad.⁸⁰ This order—like the Paris Accord, recent Glasgow Pact, and other commitments—affirms that “Responding to

1021.410(b)(1). Prior to the 2020 revision to Appendix B, exclusion B5.7 applied to “Approvals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under section 3 of the Natural Gas Act that involve minor operational changes (such as changes in natural gas throughput, transportation, and storage operations) but not new construction.” However, former Appendix D9 specified that “Approvals or disapprovals of authorizations to import or export natural gas under section 3 of the Natural Gas Act involving major operational changes (such as a major increase in the quantity of liquefied natural gas imported or exported)” would “normally require [an] EIS.” The increase in export volumes proposed here is “major”, and thus within the scope of former D9 and outside the scope of former B5.7.

In the alternative, even if the proposal here is one that fits within former B5.7, the integral elements and extraordinary circumstances requirements would preclude application of this former exemption, for the reasons stated above.

⁷⁸ *Oak Ridge Env’t Peace All. v. Perry*, 412 F. Supp. 3d 786, 846 (E.D. Tenn. 2019).

⁷⁹ 10 C.F.R. Pt. 1021 Subpart D App’x B.

⁸⁰ 86 Fed. Reg. 7619 (Jan. 27, 2021).

the climate crisis will require ... net-zero global emissions by mid-century or before.”⁸¹ Increasing exports through mid-century (*i.e.*, 2050) is inconsistent with any plausible trajectory for achieving this goal, as recognized by the International Energy Agency.⁸² Even if DOE somehow contends that expanded exports can somehow be reconciled with the President’s climate goals and policies, that surprising, and plainly wrong, contention does not change the fact that expanded exports at least “threaten” a violation of those policies, such that integral element 1 is not satisfied.

The proposal also violates integral element 4, because it has “the potential to cause significant impacts to environmentally sensitive resources,” which “include ... Federally-listed threatened or endangered species or their habitat,” “state-listed” species, “Federally-protected marine mammals and Essential Fish Habitat,” and species proposed for listing.⁸³ Impacted species include: the threatened giant manta ray,⁸⁴ threatened oceanic whitetip shark,⁸⁵ and endangered Rice’s whale (formerly designated as the Gulf of Mexico population of the Bryde’s whale).⁸⁶ These species are all at risk from ship strikes and noise from vessel traffic, impacts that will be increased by the proposed additional exports.⁸⁷ As with integral element 1, integral element 4 is precautionary: a categorical exclusion cannot be used if the proposed action would “have the potential to cause significant impacts,” even if it is unclear

⁸¹ *Id.* § 101, 86 Fed. Reg. at 7619.

⁸² Net Zero by 2050, *supra* note 10, at 102-03.

⁸³ 10 C.F.R Part 1021 Subpart D Appendix B.

⁸⁴ 83 Fed. Reg. 2,916 (Jan. 22, 2018).

⁸⁵ 83 Fed. Reg. 4,153 (Jan. 30, 2018).

⁸⁶ 86 Fed. Reg. 47,022 (Aug. 23, 2021).

⁸⁷ The potential for impacts to these species further violates integral element 1, because it threatens a violation of the Endangered Species Act and similar laws.

whether the action's impacts will in fact rise to the level of significance. Fulfilling NEPA's purpose requires investigating such potential impacts.

Ultimately, the potential to impact species and other protected resources is real. Ship strikes injure marine life, including listed whales,⁸⁸ sea turtles,⁸⁹ and giant manta rays.⁹⁰ Ship traffic also causes noise, which "can negatively impact ocean animals and ecosystems in complex ways."⁹¹ Noise interferes with animals' ability to "communicate" and "to hear environmental cues that are vital for survival, including those key to avoiding predators, finding food, and navigation among preferred habitats."⁹² Unsurprisingly, many animals display a suite of stress-related responses to increased noise. Because the proposed export increase will increase these impacts, the proposal does not satisfy integral element 4.

ii. Extraordinary Circumstances

Similarly, a categorical exclusion cannot be applied where there are "extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal."⁹³

One such extraordinary circumstance is that the Project will emit large quantities of ozone precursors in an area that is so close to exceeding the NAAQS

⁸⁸ David W. Laist et al., *Collisions Between Ships and Whales*, 17 MARINE MAMMAL SCIENCE 1, 35 (Jan. 2001) (describing ship strikes with large vessels as the "principal source of severe injuries to whales), available at <https://www.mmc.gov/wp-content/uploads/shipstrike.pdf> (attached).

⁸⁹ National Oceanic and Atmospheric Administration Fisheries, *Understanding Vessel Strikes* (June 25, 2017), available at <https://www.fisheries.noaa.gov/insight/understanding-vessel-strikes> (attached).

⁹⁰ National Oceanic and Atmospheric Administration Fisheries, *Giant Manta Ray*, <https://www.fisheries.noaa.gov/species/giant-manta-ray> (attached).

⁹¹ National Oceanic and Atmospheric Administration, *Cetacean & Sound Mapping: Underwater Noise and Marine Life*, <http://cetsound.noaa.gov/index> (attached).

⁹² *Id.*

⁹³ 10 C.F.R. § 1021.410(b)(2).

threshold.⁹⁴ Another is the geographic proximity of so many environmental justice communities.⁹⁵ Even if FERC, rather than DOE, takes the lead in reviewing these impacts, that would merely provide DOE with the possibility of meeting its NEPA obligations by adopting FERC's analysis: FERC's review does not enable DOE to apply a categorical exclusion and skip project specific NEPA analysis entirely.⁹⁶

3. DOE's Prior Life Cycle Greenhouse Gas Analyses Are Not a Substitute for NEPA Review, and Do Not Demonstrate that Greenhouse Gas Emissions Caused by the Proposal Are Consistent with the Public Interest

One way or another, DOE must revisit its prior analyses of the greenhouse gas impact of LNG exports. Procedurally, the 2014 and 2019 lifecycle analyses are not a substitute for NEPA review, as DOE continues to recognize.⁹⁷ Although the lifecycle analyses can inform NEPA review, DOE must address the impacts of this and other LNG proposals within the NEPA framework.

More fundamentally, the lifecycle analyses both ask the wrong questions and do not reflect available science regarding LNG's impacts.

a) The Life Cycle Analyses Ask the Wrong Questions

Cheniere seeks authorization to increase exports through 2050. DOE therefore must take a hard look at the environmental impact of expanded exports of LNG across that thirty-year time period, with the long-term gas production and use such exports necessarily entail. This includes addressing whether such impacts are consistent with the United States' climate goals. They are not. But the lifecycle

⁹⁴ See Resource Report 9, at 9-3 – 9-4, Accession 20230330-5209.

⁹⁵ See *supra* notes 41-48.

⁹⁶ See *Oak Ridge Env't Peace All. v. Perry*, 412 F. Supp. 3d 786, 846 (E.D. Tenn. 2019), *appeal dismissed*, No. 19-6332, 2021 WL 2102583 (6th Cir. Jan. 14, 2021).

⁹⁷ *E.g.*, 85 Fed. Reg. at 78,202 (The life cycle “reports are not part of DOE's NEPA review process.”).

analyses do not address this issue. That is, the analyses do not provide any discussion of whether increasing LNG export will help or hinder achievement of the long-term drastic emission reductions that are essential to avoiding the most catastrophic levels of climate change.

Instead, the analyses look only to the short term. The only questions asked by the analyses are “How does exported LNG from the United States compare with” other fossil fuels (coal or other gas) used in used “in Europe and Asia, from a life cycle [greenhouse gas] perspective?”⁹⁸ DOE has attempted to justify this narrow focus by arguing that in the present moment, LNG primarily competes with other sources of fossil fuel. But DOE has not contended, nor can it, that this will be true throughout the thirty-year requested authorization term.

Limiting global temperature rise to 1.5 degrees Celsius will require dramatic emission reductions in the near and long term, reductions which are inconsistent with further development of long-lived fossil fuel infrastructure in the U.S. or abroad, as confirmed by the International Energy Agency,⁹⁹ Intergovernmental Panel on Climate Change,¹⁰⁰ and others. Executive Order 14,008 appropriately instructs federal agencies to work to discourage other countries from “high carbon investments” or “intensive fossil fuel-based energy.”¹⁰¹ The lifecycle analyses argue that the infrastructure needed to receive and use U.S. LNG is not higher emitting than other sources of fossil fuel, but the analyses do not inform decisionmakers or the public whether facilities to use U.S. LNG are nonetheless such a “high-carbon,” “intensive” source of emission that they must be discouraged.

⁹⁸ 84 Fed. Reg. 49,278, 49,279 (Sept. 19, 2019).

⁹⁹ IEA, Net Zero by 2050 at 101-02.

¹⁰⁰ Intergovernmental Panel on Climate Change, *Special Report: Global Warming of 1.5 C, Summary for Policymakers* at 13-17 (May 2019), available at <https://www.ipcc.ch/sr15/> (attached).

¹⁰¹ Executive Order 14,008 at § 102(f), (h).

Even for the short term, the lifecycle analyses ignore important parts of the question of how DOE's decision to authorize additional U.S. LNG exports will affect greenhouse gas emissions. DOE has recognized, for example, that increasing LNG exports will both cause some gas-to-coal shifting in the U.S. electric sector.¹⁰² Similarly, DOE has acknowledged that "U.S. LNG Exports may ... compete with renewable energy ... as well as efficiency and conservation measures" in overseas markets.¹⁰³ Indeed, while DOE has refused to address the likely share of U.S. LNG exports that will be displaced by fossil fuels, peer reviewed research concludes that such exports are likely to play only a limited role in displacing foreign use of coal, and such that U.S. LNG exports are likely to increase net global GHG emissions.¹⁰⁴

Finally, while it is important to address foreseeable overseas impacts of LNG exports, DOE also needs to examine the impact of increased exports specifically on domestic or territorial emissions. The world must transition away from fossil fuel development as quickly as possible.¹⁰⁵ It is inappropriate, unfair, and nonstrategic for the U.S. to argue that it can nonetheless increase fossil fuel production, and enjoy the purported economic benefits thereof, because the associated emissions will be offset by foregone production elsewhere. Instead, nations' commitments under the Paris Accord and similar agreements "should include greenhouse gas emissions and removals taking place within national territory and offshore areas over which the country has jurisdiction."¹⁰⁶ Requiring nations to measure and report territorial

¹⁰² EIA 2014, *supra* note 11, at 12, 19.

¹⁰³ DOE/FE Order 3638 at 202-03.

¹⁰⁴ Gilbert, A. Q. & Sovacool, B. K., *US liquefied natural gas (LNG) exports: Boom or bust for the global climate?*, Energy (Dec. 15, 2017), available at <https://doi.org/10.1016/j.energy.2017.11.098> (attached).

¹⁰⁵ Intergovernmental Panel on Climate Change, *Synthesis Report of the IPCC Sixth Assessment Report: Summary for Policymakers* at 11, available at https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf (attached).

¹⁰⁶ Witi, J. & Romano, D., 2019 Refinement to the 2006 IPCC Guidelines for

emissions also ensures the reliability of emission calculations, as nations can only directly regulate emissions within their borders. Estimates of emissions from activities within the U.S. are also likely to be more accurate than estimates that seek to trace the lifecycle of fuels combusted in an end use country. For all of these reasons, a hard look at the climate impact of increasing U.S. LNG exports must address the impact of such exports on domestic emissions specifically, in addition to including reasonable forecasting about global impacts.

b) The 2019 and 2014 Lifecycle Analyses Understate Emissions

In addition to asking the wrong questions, DOE's prior lifecycle analyses are factually unsupported and understate emissions, as Sierra Club has previously explained.

First, the 2019 analysis assumes that the “upstream emission rate” or “leak rate” of U.S. LNG exports—the amount of methane that is emitted to the atmosphere during production, processing, and transportation of gas to the export facility—is 0.7% of the gas delivered.¹⁰⁷ Studies measuring actual emissions find much higher leak rates: a 2020 study that found that oil and gas production in the Permian basin had a leak rate of roughly 3.5% or 3.7%.¹⁰⁸ As we have previously

National Greenhouse Gas Inventories, Chapter 8: Reporting and Tables, *available at* https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/1_Volume1/19R_V1_Ch08_Reporting_Guidance.pdf, at 8.4.

¹⁰⁷ 2019 Life Cycle GHG Perspective at 27.

¹⁰⁸ See Yuzhong Zhang *et al.*, *Quantifying methane emissions from the largest oil-producing basin in the United States from space*, SCIENCE ADVANCES (Apr. 22, 2020), DOI: 10.1126/sciadv.aaz5120, *available at* <https://advances.sciencemag.org/content/6/17/eaaz5120/tab-pdf> (attached); *see also* Environmental Defense Fund: New Data: Permian Oil & Gas Producers Releasing Methane at Three Times National Rate (Apr. 7, 2020), *available at* <https://www.edf.org/media/new-data-permian-oil-gas-producers-releasing-methane->

explained, there are many reasons to believe these atmospheric measurements are more reliable than the “bottom up” estimates used by DOE—notably, the fact that bottom up estimates poorly represent the rare but severe major leaks that constitute a large fraction of upstream emissions.¹⁰⁹ Every year, new research further affirms that gas production emits greater amounts of methane than what DOE’s analyses have assumed, despite ongoing efforts to reduce methane emissions.¹¹⁰ At a minimum, DOE must review and to respond to this research before approving any further LNG export applications.

4. Rigorous NEPA Review Will Indicate That The Environmental Impacts From The Project Render It Not In The Public Interest

As explained above and in scoping comments and a protest before FERC, the Project will have multiple, significant environmental impacts, rendering the Project not in the public interest. This will be confirmed by NEPA review. And once an adequately broad NEPA review is performed, it is likely that even more adverse impacts will be revealed because Cheniere’s FERC and DOE applications are so scant. But even with the information available now, the Project is not consistent with the public interest due to its environmental impacts.

For starters, the Project’s direct greenhouse gas emissions alone make it not in the public interest. FERC’s recent practice has been to calculate the social cost of carbon for projects’ direct greenhouse gas emissions.¹¹¹ DOE must use social cost

three-times-national-rate (attached).

¹⁰⁹ Sierra Club, Comment on 2019 Update to Life Cycle Greenhouse Gas Perspective, at 6-8 (Oct. 21, 2019), *available at* <https://fossil.energy.gov/app/DocketIndex/docket/DownloadFile/604>.

¹¹⁰ See NRDC, *Sailing to Nowhere: Liquefied Natural Gas Is Not an Effective Climate Strategy* (Dec. 2020), *available at* <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf> (attached).

¹¹¹ See, e.g., *Texas LNG Brownsville, LLC*, 183 FERC ¶ 61,047, P21 (Apr. 21, 2023).

figures here to determine whether the Project is consistent with the public interest. Plainly it is not. FERC recently determined that the social cost of the direct emissions of a similarly sized LNG export project would be over \$2 billion.¹¹² Of course, analysis of the Project's direct, upstream, and downstream greenhouse gas emissions, as required here, would reveal even greater impacts. DOE must incorporate the impact of the Project's greenhouse gas emissions in its public interest determination. When it does so, it should determine that the Project is not consistent with the public interest.

The Project would have other serious environmental impacts as well. Some have already been discussed herein—the Project's conventional air pollution and impacts to environmental justice communities. As explained more fully in scoping comments and a protest to FERC, the Project will have numerous other environmental impacts as well. Both the scoping comments¹¹³ and the protest¹¹⁴ and all attachments thereto are hereby incorporated herein. NEPA review is likely to reveal even more environmental impacts. Ultimately, the high cost of the Project's environmental impacts renders the Project inconsistent with the public interest.

Although, FERC has wrongly limited the use of social cost figures to “informational purposes” rather than using them to assess, *e.g.*, the impact of a given project's greenhouse gas emissions or whether a given project is consistent with the public interest. *See id.*

¹¹² *Id.* P24.

¹¹³ Sierra Club et al., Scoping Comments in PF22-10, Accession 20221212-5228 (attached).

¹¹⁴ Sierra Club et al., Protest in CP23-129, Accession 20230504-5123 (attached).

C. Cheniere's Application Overstates the Potential Benefits of the Project

Rather than addressing the central issues with this application, Cheniere used its application to paint an inaccurate picture of the purported benefits of the Project.

Cheniere wrongly suggests that the Project will play an important role in supplying Europe LNG so it can maintain energy security while moving off of Russian LNG.¹¹⁵ To be sure, because of the Russian invasion of Ukraine, there is a geopolitical and humanitarian crisis in Europe. One that involves a potential energy shortage in countries that previously relied on Russian LNG. But the United States only plans to ensure a supply of LNG until 2030.¹¹⁶ And Cheniere does not plan to bring the Project online until 2031 at the earliest.¹¹⁷ Even if Cheniere planned to bring the Project online earlier, no additional LNG infrastructure is needed to satisfy the additional demand from Europe.¹¹⁸ Thus, even in the best case scenario, the Project would provide no benefit to Europe and is not necessary to assist Europe during this remarkably challenging time.

Cheniere also points to purported economic benefits of the Project, largely from providing jobs, purchasing goods and services, and tax revenue.¹¹⁹ But, in

¹¹⁵ Cheniere Application at 14.

¹¹⁶ The White House, *FACT SHEET: United States and European Commission Announce Task Force to Reduce Europe's Dependence on Russian Fossil Fuels* (Mar. 25, 2022), available at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/25/fact-sheet-united-states-and-european-commission-announce-task-force-to-reduce-europes-dependence-on-russian-fossil-fuels/> (attached).

¹¹⁷ Cheniere Application 6 n.12.

¹¹⁸ Clark Williams-Derry, *The U.S. Can Increase LNG Exports to Europe: No New Contracts or Infrastructure are Required*, at 1 (Apr. 2022), available at https://ieefa.org/sites/default/files/2022-05/The-US-Can-Increase-LNG-Exports-to-Europe_April-2022.pdf (attached).

¹¹⁹ Cheniere Application at 11.

many respects, the application is too vague to determine whether the Project will provide the public benefits as suggested by Cheniere. As previously discussed, Cheniere entirely fails to analyze the distributive implications of the Project. Who will these jobs go to? Which services will benefit from supposed increased activities? *Etc.* Cheniere touts the Project as tax beneficial but entirely fails to discuss tax incentive programs that it plans to avail itself of and any implications thereof. In other respects, the application is self-refuting. For example, Cheniere acknowledges that only 10% of the goods will be purchased locally,¹²⁰ undermining Cheniere's suggestion that the Project will have a meaningful local economic benefit. Further undermining this suggestion, Cheniere's acknowledgement that the Project will only result in 45 permanent jobs and doesn't claim that any of these jobs will be local hires.¹²¹

Thus, for these and other reasons, Cheniere has failed to establish that the Project will be beneficial to the public.


¹²⁰ *Id.*

¹²¹ *Id.*

III. Conclusion

For the reasons stated above, Sierra Club's motion to intervene in this docket should be granted. The Project is not consistent with the public interest and the instant application should be denied. At a minimum, DOE must not approve the application without reviewing whether current gas price spikes call into question DOE's prior analyses and assumptions about the effects of increased exports on domestic gas production and prices. Nor can DOE approve the application without taking a hard look at foreseeable environmental impacts occurring throughout the LNG lifecycle.

Ultimately, the United States and nations around the globe have set ambitious but necessary goals for reducing greenhouse gas emissions during the proposed authorization period. Additional gas exports and use cannot be reconciled with those goals, and this proposal should be denied.



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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF

Corpus Christi Liquefaction, LLC
CCL Midscale 8-9, LLC
Cheniere Marketing, LLC

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FECM Docket No. 23-46-LNG

CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

Pursuant to 10 C.F.R. § 590.103(b), I, Thomas Gosselin, hereby certify that I am a duly authorized representative of the Sierra Club, and that I am authorized to sign and file with the Department of Energy, Office of Fossil Energy and Carbon Management, on behalf of the Sierra Club, the foregoing documents and in the above captioned proceeding.

Dated at San Antonio, TX this 7th day of July, 2023



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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF

Corpus Christi Liquefaction, LLC
CCL Midscale 8-9, LLC
Cheniere Marketing, LLC

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FECM Docket No. 23-46-LNG

VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Thomas Gosselin, hereby verify under penalty of perjury that I am authorized to execute this verification, that I have read the foregoing document, and that the facts stated therein are true and correct to the best of my knowledge.

Executed at San Antonio, TX on July 7, 2023



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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF

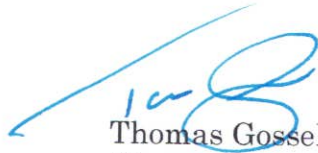
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Cheniere Marketing, LLC

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FECM Docket No. 23-46-LNG

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 590.107, I, Thomas Gosselin, hereby certify that I caused the above documents to be served on the persons included on the official service list for this docket, as provided by DOE/FE, on July 7, 2023.



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