

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
)

**Motion to Intervene and Protest of Louisiana Bucket Brigade,
Deep South Center for Environmental Justice, Sierra Club, and Healthy Gulf**

In the above-captioned docket, Gulfstream LNG Development, LLC (“Gulfstream LNG”) requests authorization to export up to 237.5 Bcf/year, or approximately 650 MMcf/d of natural gas as liquified natural gas (“LNG”) from a terminal to be constructed in Plaquemines Parish, Louisiana.¹ Sierra Club, Healthy Gulf, Deep South Center for Environmental Justice, and Louisiana Bucket Brigade and Sunrise Movement, hereby move to intervene in this docket, pursuant to 10 C.F.R. § 590.303(b). Additionally, Sierra Club, Healthy Gulf, Deep South Center for Environmental Justice, and Louisiana Bucket Brigade and Sunrise Movement (collectively “Environmental Advocates”) concurrently protest this application, pursuant to 10 C.F.R. § 590.304, as inconsistent with the public interest, 15 U.S.C. § 717b(a).

LNG exports are harming Americans *now*. In the winter of 2021, the Energy Information (“EIA”) Administration anticipated a 30% increase in American home heating bills.² The EIA estimated that wholesale gas prices would double, driven largely by increased demand for LNG exports.³ While in spring 2023, the EIA anticipates that natural gas prices will increase from their

¹ U.S. DOE, Application of Gulfstream LNG Development, LLC for Long-Term Authorization to Export Liquified Natural Gas to Free Trade and Non-Free Trade Agreement Nations (Mar. 10, 2023), *available at* <https://www.energy.gov/sites/default/files/2023-03/23-34-LNG.pdf> (hereinafter “Gulfstream LNG Authorization Application”).

² U.S. EIA, Winter Fuels Outlook (Oct. 2021) at 1, *available at* https://www.eia.gov/outlooks/steo/special/winter/2021_Winter_Fuels.pdf.

³ 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 as Exhibit A); *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 as Exhibit B).

recent lows as demand for natural gas increases.⁴ Gulfstream seeks to increase exports 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 Gulfstream LNG's application without revisiting these analyses. And DOE must consider whether winter gas price increases warrant imposing conditions on Gulfstream's application, such as allowing exports only in other seasons outside of peak demand.

LNG exports will also harm Americans *for generations*. Gulfstream LNG seeks to increase its LNG exports *through 2050*. But well before 2050, the world must have fully transitioned to net-zero emissions, as the U.S.—and the world—recently affirmed in Glasgow.⁵ 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.”⁶ Global LNG export volumes must decline below present levels in the near future: as the International Energy Agency recently affirmed, further expansion of LNG export facilities cannot be part of the path to net-zero emissions.⁷

For the reasons stated in this intervention and protest Gulfstream LNG's request to extend its operation deadline is inconsistent with the public interest and should be denied. 15 U.S.C. § 717b(a).

I. Intervention

As noted, the Environmental Advocates request to intervene in this docket. DOE's rules do not articulate any particular standard for timely intervention, and as such, intervention should be granted liberally. DOE merely requires that would-be-intervenors 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, the Environmental Advocates' position is that the application should be denied or, in the alternative, heavily conditioned. The Environmental

⁴ U.S. EIA, U.S. Henry Hub natural gas price expected to increase from recent lows, available at <https://www.eia.gov/todayinenergy/detail.php?id=56501> (attached as Exhibit C).

⁵ 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 as Exhibit D).

⁶ *Id.*

⁷ 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 (hereinafter “Net Zero by 2050”) (attached as Exhibit E).

Advocates' interests are based on the impact the proposed additional exports will have on each organizations' members and the organizations' missions.

The requested authorization to export LNG will harm the Environmental Advocates and each of their 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 request application will further harm the Environmental Advocates and each of their 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,⁸ and increasing gas production increases ozone pollution, including risking creation of new or expanded ozone non-attainment areas or exacerbating existing non-attainment.⁹ Gulfstream LNG has previously explained that it “anticipates that the sources of natural gas will include supplies from various producing regions including . . . the Permian, Haynesville, Eagle Ford, Barnett, an Marcellus shale plays[.]”¹⁰ The increase in extraction will harm members of the Environmental Advocates' organizations who are located in Texas by subjecting them to harmful levels of ozone, including ozone caused by oil and gas production.

Increasing export volumes will also necessarily increase shipping traffic beyond levels that would otherwise occur.¹¹ This additional vessel or tanker traffic will result in an increase in air pollution such as carbon monoxide and ozone-forming nitrogen oxides. Increased ship traffic will

⁸ 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 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.”).

⁹ 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>.

¹⁰ Gulfstream LNG Development LLC, Application in FECM Dkt. 23-34-LNG, at 4 (Mar. 10, 2023) *available at* <https://www.energy.gov/sites/default/files/2023-03/23-34-LNG.pdf>.

¹¹ 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 *actual* amount of tanker traffic, even though traffic would stay below previously *authorized* levels).

also harm wildlife that each organization's members enjoy viewing, etc., including the recently-listed threatened giant manta ray,¹² pallid sturgeon,¹³ threatened oceanic whitetip shark,¹⁴ and endangered Rice's whale (formerly designated as the Gulf of Mexico population of the Bryde's whale).¹⁵

Finally, increasing LNG exports will impact the Environmental Advocates and their members because of the additional greenhouse gases emitted throughout the LNG lifecycle, from production, transportation, liquefaction, and end use. *See Section II.C below.* The impacts from climate change are already harming members of the Environmental Advocates' organizations 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.¹⁶ 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.

In summary, Gulfstream LNG's application to export LNG will harm the Environmental Advocates and their members in numerous ways. Consequently, the Environmental Advocates contend that the application should be denied or conditioned, as further described in the protest.

A. Sierra Club

Sierra Club is a non-profit organization and the nation's oldest grassroots organization. Sierra Club has over 3,200 members in Louisiana, including many in the Barnett Shale region and other areas that will likely be impacted by increased gas production. Additionally, Sierra Club has 23,334 members in Texas are already subject to harmful levels of ozone, including ozone caused by oil and

¹² Final Rule to List the Giant Manta Ray as Threatened Under the Endangered Species Act, 83 Fed. Reg. 2,916 (Jan. 22, 2018).

¹³ U.S. Fish & Wildlife Service, Pallid sturgeon (*Scaphirhynchus albus*), available at <https://ecos.fws.gov/ecp/species/7162#status>.

¹⁴ Listing the Oceanic Whitetip Shark as Threatened Under the Endangered Species Act, 83 Fed. Reg. 4,153 (Jan. 30, 2018).

¹⁵ Technical Corrections for the Bryde's Whale (Gulf of Mexico Subspecies), 86 Fed. Reg. 47,022 (Aug. 23, 2021).

¹⁶ WGNO, Plaquemines Parish has a long history with storms (Aug. 25, 2021), available at <https://wgno.com/weather/tracking-the-tropics/plaquemines-parish-has-a-long-history-with-storms/>.

gas production. This particularly includes' Sierra Club's 6,057 members residing with the Dallas-Fort Worth ozone non-attainment area.¹⁷ The requested authorization by Gulfstream LNG will harm Sierra Club its members in numerous ways which would not likely occur without the requested authorization. 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 person for the official service list:

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B. Healthy Gulf

Healthy Gulf is a 501(c)(3) organization with several hundred members in Louisiana. Healthy Gulf also employs staff members, primarily based in Louisiana, who work to protect the integrity of wetlands, waters, wildlife, and other ecological resources throughout Louisiana and the Gulf Region. This work will be directly affected by the construction and operation of the proposed facilities. Healthy Gulf states that the exact name of the movant is Healthy Gulf, and the movant's principal place of business is 935 Gravier Street, Suite 700, New Orleans, LA 70112.

Pursuant to 10 C.F.R. § 590.303(d), Healthy Gulf identifies the following person for the official service list:

Naomi Yoder
Staff Scientist
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¹⁷ 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>.

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C. Louisiana Bucket Brigade

The Louisiana Bucket Brigade is a 501(c)(3) organization that works to protect our state's communities and environment from the devastation caused by the petrochemical and oil and gas industry. The Louisiana Bucket Brigade seeks to hold industry and government accountable to the true costs of pollution and environmental destruction. This project would greatly impact the Louisiana Bucket Brigade's work and mission due to the vast implications this project would have for the invaluable ecosystems of our coast and the people of Louisiana who depend on these natural resources. The Louisiana Bucket Brigade states that the exact name of the movant is Louisiana Bucket Brigade, and the movant's principal place of business is 3416B Canal Street, New Orleans, LA 70119.

Pursuant to 10 C.F.R. § 590.303(d), the Louisiana Bucket Brigade identifies the following person for the official service list:

Shreyas Vasudevan
Campaign Coordinator
3416B Canal Street
New Orleans, LA 70119
shreyas@labucketbrigade.org

D. Deep South Center for Environmental Justice

Deep South Center for Environmental Justice is a 501(c)(3) organization that works to improve the lives of children and families harmed by pollution and who are vulnerable to climate change in the Gulf Coast Region through research, education, community and student engagement for policy change, as well as health and safety training for environmental careers. This project would greatly impact Deep South Center for Environmental Justice's mission by increasing harmful pollutants and releasing greenhouse gases which will contribute to climate change which disproportionately affects the Gulf Coast Region. Deep South Center for Environmental Justice states

that the exact name of the movant is Deep South Center for Environmental Justice, and the movant's principal place of business is 9801 Lake Forest Boulevard, New Orleans, LA 70127.

Pursuant to 10 C.F.R. § 590.303(d), Deep South Center for Environmental Justice identifies the following person for the official service list:

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E. Sunrise Movement – New Orleans

Sunrise Movement is a 501(c)(4) organization that works to stop climate change while creating jobs and educating communities in the process. Sunrise Movement's campaign for a Green New Deal for Communities is focused on bringing free public transportation, safe public housing, and creating good jobs in order to stop the climate crisis. Sunrise Movement's New Orleans Chapter ("Sunrise New Orleans") is focused on bringing this vision to Southeast Louisiana by opposing the construction of LNG methane export terminals in Plaquemines Parish, Louisiana as well as related pipelines and projects across the region. The construction and operation of the Gulfstream LNG facility will significantly impact Sunrise New Orleans' mission by contributing to climate change and the community's reliance on environmentally detrimental industries.

Pursuant to 10 C.F.R. § 590.303(d), Sunrise New Orleans identifies the following person for the official service list:

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II. Protest

The requested long-term authorization should be denied because it is contrary to the public interest. 15 U.S.C. § 717b(a). As DOE has previously explained when reviewing applications "when reviewing an application for export authorization," DOE evaluates "economic impacts, international impacts, security of natural gas supply, and environmental impacts, among others."¹⁸ Here, each of

¹⁸ DOE/FE Order No. 4010, FE Docket No. 16-109-LNG at 14-15 (June 29, 2017), available at

the public interest factors weighs against granting Gulfstream LNG’s authorization application.

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.”¹⁹ Recent data such as the Freeport LNG explosion and the Winter 2021-2022 gas prices demonstrate that exports are increasingly linking domestic gas prices to prices in the global market. These increases harm American households and energy intensive industry.

1. The Freeport LNG explosion further affirms that the Gulfstream LNG project will increase domestic gas prices, harming consumers.

In June 8, 2022, an explosion and fire occurred at the Freeport LNG facility – and the resulting drop in domestic gas prices – provided stark confirmation that increasing LNG exports will cause real and significant increases in domestic gas prices. Thus, the Freeport LNG explosion demonstrates that the requested authorization is not in the public interest and constitutes new information requiring DOE to revisit its 2020 Policy Statement.

The EIA has estimated that the Freeport shutdown took roughly 17% (or 2 billion cubic feet per day) of the total U.S. LNG export capacity offline.²⁰ Immediately after the explosion was reported, domestic gas prices fell by 16 percent,²¹ highlighting the direct connection between gas exports and domestic prices and supply. Despite this initial drop, domestic gas prices remain exceptionally high as a result of LNG exports, as discussed in the next section. DOE must address the Freeport LNG explosion, and the demonstrated connection between LNG exports and domestic

<https://www.energy.gov/sites/prod/files/2017/06/f35/ord4010.pdf>; DOE/FE Order o. 3909, FE Docket No. 13-132-LNG at 17-22 (Nov. 30, 2016), available at <https://www.energy.gov/sites/prod/files/2016/11/f34/ord3909.pdf>.

¹⁹ See, e.g., DOE/FE Order No. 3357-B, available at <https://www.energy.gov/sites/prod/files/2014/11/f19/ord%203357-B.pdf>, at 10; 85 Fed. Reg. 53,243 (Aug. 25, 2020) (“In evaluating the public interest, DOE takes seriously the potential economic impacts of higher natural gas prices.”).

²⁰ U.S. Energy Information Administration, Fire Causes Shutdown of Freeport Liquefied Natural Gas Export Terminal (June 23, 2022), <https://www.eia.gov/todayinenergy/detail.php?id=52859> (attached as Exhibit F).

²¹ Pippa Stevens, Natural Gas Plummets as Freeport Delays Facility Restart Following Explosion, CNBC (June 14, 2022), <https://www.cnbc.com/2022/06/14/natural-gas-plummets-as-freeport-delays-facility-restart-following-explosion.html> (attached as Exhibit G).

prices, in its public interest analysis.

2. Winter 2021-2022 gas prices demonstrate that LNG exports are harming U.S. consumers.

The price impacts of LNG exports are harming Americans *now*. Wholesale gas prices for the winter of 2021-2022 were vastly higher than for the prior winter, and FERC concluded that the increase was driven largely by competition with demand for LNG exports.²² The Wall Street Journal,²³ S&P Global Platts Analytics,²⁴ the Institute for Energy Economics and Financial Analysis, and others agreed that LNG exports were driving up domestic gas prices. Indeed, FERC identified LNG exports as the “primar[y]” source of the additional demand that drove the gas price increases.²⁵ And these price increases were severe. For the winter of 2021-2022, benchmark future prices at the Henry Hub increased 103% relative to the prior 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 FERC, Winter Energy Market and Reliability Assessment (Oct. 21, 2021), *supra* note 3 at 2; *accord id. at 11*. See also IEEFA, Booming U.S. natural gas exports, *supra* note 3.

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> (hereinafter “Natural-Gas Exports Lift Prices”).

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 Winter Energy Market Assessment, *supra* note 3 at 2.

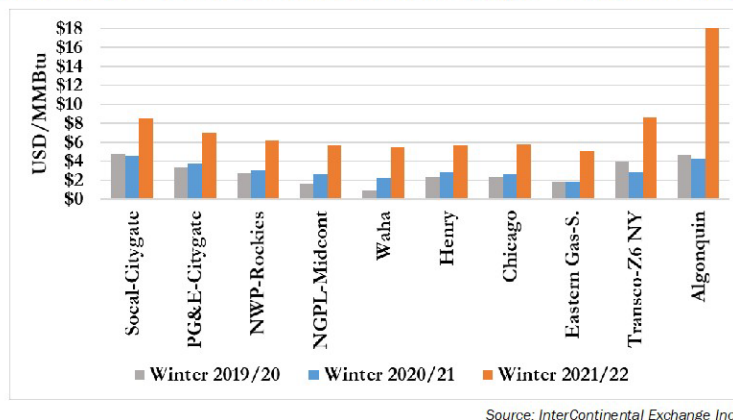
²⁶ *Id.* at 2, 11.

²⁷ *Id.* at 12.

²⁸ FERC, 2021-2022 Winter Energy Market and Reliability Assessment Presentation (Oct. 21, 2021) at 10, *available at* https://ferc.gov/sites/default/files/2021-10/Winter%20Assessment%202021-2022_Presentation.pdf (attached as Exhibit H).

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



These price increases harm both households and industrial energy consumers. The EIA predicted that homes that use gas for heat would spend 30% more in the winter of 2021-2022 than they spent the prior winter.²⁹ The Industrial Energy Consumers of America, which represents manufacturers that use at least 1 million MMBtu of energy per year,³⁰ has repeatedly written to DOE about how export-driven gas prices increases are harming domestic industry.³¹

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.³² DOE is charged with protecting the “public” interest, 15 U.S.C. § 717b(a); that is, the interest “of ... all or most of the people” in the United States.³³ DOE has previously recognized that “the distributional

²⁹ *Id.* at 13.

³⁰ “Membership Info,” IECA, <https://www.ieca-us.com/membership-info/> (last accessed Dec. 7, 2021).

³¹ 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.

³² Synapse Energy Economics, Inc., *Will LNG Exports Benefit the United States Economy?* (Jan. 23, 2013) at 9, available at https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/export_study/Exhibits_1-20.pdf (attached as Exhibit I) (initially submitted as Exhibit 5 to Comments of Sierra Club *et al.* on the 2012 NERA macroeconomic report).

³³ *Public*, Merriam-Webster Unabridged Dictionary, available at <http://www.merriam-webster.com/dictionary/public> (last visited Dec. 7, 2021).

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.”³⁴ 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,³⁵ but DOE has not 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.³⁶ Increased gas prices will exacerbate the existing energy burden disparities, placing these households at even further risk. Especially in light of this administration’s emphasis on environmental justice, the distributional and equity impacts of export-driven gas price increases require careful consideration.

Gulfstream LNG, for its part, ignores these issues. In fact, Gulfstream LNG’s authorization application is entirely silent regarding impacts to domestic gas prices. Gulfstream LNG argues that its application is consistent with the public interest because U.S. gas reserves are sufficient to meet both domestic needs and exports.³⁷ 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. As the Wall Street Journal recently explained, “American frackers ... are holding the line on new drilling as investors pressure them to maintain capital discipline and return money to shareholders. *The result*

³⁴ 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.

³⁵ *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>.

³⁶ 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 as Exhibit J); *Accord* Eva Lyubich, *The Race Gap in Residential Energy Expenditures* (June 2020), *available at* <https://haas.berkeley.edu/wp-content/uploads/WP306.pdf> (attached as Exhibit K).

³⁷ Gulfstream LNG Authorization Application, *supra* note 1 at 8.

*is that natural gas exports are pushing domestic prices higher.”*³⁸ It is notable, too, that as Gulfstream LNG would push domestic gas prices even higher, it also suggests it will take advantage of those higher prices.³⁹

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 current surge in gas prices calls those prior analyses into question, and DOE cannot approve additional exports—or blindly follow previous findings, including its conclusions in the 2020 Policy Statement—without carefully examining the continuing validity of those analyses. We understand that DOE and the EIA are currently revisiting the 2012 and 2014 LNG export studies; an updated analysis was expected in the spring of 2022, but appears not to have been released yet.⁴⁰ At a minimum, DOE should not approve further export applications or extensions 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,⁴¹ DOE has stated its reluctance to exercise such authority.⁴² But if export applications are, in effect, a one-way ratchet on export volumes, DOE cannot issue such authorizations carelessly.

The NGA’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 “subsidiary purposes” of addressing “conservation, environmental,

³⁸ Natural-Gas Exports Lift Prices, *supra* note 23. (emphasis added).

³⁹ When describing its proposed project, the applicant notes: “Gulfstream LNG may also deliver LNG to domestic markets via smaller ship and barge LNG vessels, as well as LNG tanker trucks.” Gulfstream LNG Authorization Application, *supra* note 1 at 3, footnote 1.

⁴⁰ <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).

⁴¹ 15 U.S.C. § 717o.

⁴² 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.

and antitrust issues.”⁴³ 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. Similarly, DOE’s conclusion in its 2020 Policy Statement that LNG exports had not increased domestic gas prices⁴⁴ is clearly outdated and must be revisited. Accordingly, even putting aside the numerous and severe environmental impacts of increased LNG exports, Gulfstream LNG’s application is inconsistent with the public interest and should be denied.

3. Recent global strategic interest developments demonstrate that LNG exports are not in the public interest.

The LNG market has substantially changed. It is clear that the need for LNG proposed for export to meet global market demands no longer exists at the rate anticipated over five years ago, and DOE consider this when evaluating Gulfstream LNG’s application. A recent report by the Institute for Energy Economics and Financial Analysis (“IEEFA”) points out that “the EU is taking aggressive steps to trim gas consumption, which could render new LNG import capacity unneeded.”⁴⁵ The aggressive steps being taking by the EU is part of the growing international recognition that avoiding the worst impacts of climate change requires abandoning large fossil fuel development or expansion.

As discussed in Section C.2.a, the 2022 National Oceanic and Atmospheric Administration (“NOAA”) Report and the Intergovernmental Panel on Climate Change’s (“IPCC”) 6th Assessment Report provides overwhelming evidence that climate hazards are more urgent and severe than previously thought, and that aggressive reductions in emissions within the next decade are essential to avoiding the most devastating climate change harms. Similarly, the Biden administration has prioritized tackling the climate crisis, including by reinstating and expanding the U.S.’s international commitments to reduce greenhouse gas emissions. A 2021 IEA report also reiterates that LNG exports

⁴³ *Minisink Residents for Env’t Pres. & Safety v. FERC*, 762 F.3d 97, 101 (D.C. Cir. 2014) (cleaned up).

⁴⁴ 2020 Policy Statement at 52,244.

⁴⁵ IEEFA, *Global LNG Outlook 2023-27*, at 3 available at <https://ieefa.org/resources/global-lng-outlook-2023-27> (Feb. 2023) (“through 2030 EU gas demand could fall by 40% or more, driven by legally binding emissions reduction targets, policy measures to ensure energy security and demand destruction stemming from high prices.”) (hereinafter “Global LNG Outlook”) (attached as Exhibit L).

cannot be part of a net-zero by 2050 future, projecting that natural gas traded as LNG will drop by 60 percent from 2030 to 2050 and global demand will decrease by over five percent in the 2030s alone.⁴⁶ This decrease in demand is further supported in IEEFA’s analysis which concludes that “new projects coming online in 2025-27 will likely encounter weaker-than-expected demand – elevating the risk of lower prices and profits for LNG suppliers and trader.”⁴⁷ Thus, European buyers recognize that LNG, long touted as a climate solution, is in fact a climate problem.⁴⁸

Additionally, a recent study by Global Energy Monitor notes that 21 export terminals totaling 265 million tonnes per annum (“MTPA”) of capacity continue to report FID delays or other serious setbacks amid an uncertain market.⁴⁹ Those terminals represent 38 percent of the 700 MTPA export capacity under development worldwide. With increased delays in FIDs⁵⁰ and project construction, the probability increases that these projects, including that proposed by Gulfstream LNG, will become obsolete long before the end of their intended lifespans.⁵¹ These market changes underscore the absence of and/or rapidly declining demand for construction of U.S. LNG export terminals. Given the significant changed economic, political and scientific circumstances that have developed in recent years, Gulfstream LNG’s application is not in the public interest.

4. Current outstanding projects undermine DOE’s ability to make a public interest determination.

DOE’s own recent policy statement confirmed that there is already an over-abundance of approved LNG export capacity, such that Gulfstream LNG’s proposal for additional export is not in the public interest. On April 21, 2023, DOE published policy regarding the extension of export

⁴⁶ Net Zero by 2050, *supra* note 7.

⁴⁷ Global LNG Outlook, *supra* note 45 at 3.

⁴⁸ Lydia Plante and Ted Nace, Nervous Money, Global Energy Monitor, at 4 (June 2021), available at <https://globalenergymonitor.org/report/nervous-money/> (attached as Exhibit M).

⁴⁹ *Id.* at 3.

⁵⁰ Multiple LNG projects, including Port Arthur LNG and Cameron LNG have delayed making final investment decisions due to changes in the global LNG market, including decreased demand from LNG market oversaturation. Sempra likely to delay Texas Port Arthur LNG decision to 2022, REUTERS (May 5, 2021), <https://www.reuters.com/business/energy/sempra-likely-delay-texas-port-arthur-lng-decision-2022-2021-05-05/> (attached as Exhibit N).

⁵¹ *Id.*

commencement deadlines addresses issues DOE is facing when evaluating the market for LNG export due to authorization overhang. However, this problem is also relevant when evaluating whether DOE should approve new export authorization requests. DOE has stated that “as more authorization holders are authorized to export or re-export U.S. – sourced LNG to non-FTA countries – but are not engaged in actual export or re-export operations – this approval gap, or ‘authorization overhang,’ [widens and results in] detrimental effects.”⁵²

Presently, the difference in approved exports is 25.64 Bcf/d, “with approved non-FTA exports from the United States totaling 49.83 Bcf/d, and 24.18 Bcf/d of export capacity operating or under construction.”⁵³ This overhang is larger than today’s proven “U.S. LNG export market at 24.19 Bcf/d[,]”⁵⁴ resulting in an inaccurate picture of investment-backed commitments involving U.S. LNG. DOE stated that this overhang is disruptive to the agency’s “planning, economic forecasting, and market analysis of the U.S. LNG export market.”⁵⁵ Gulfstream LNG’s application is not in the public interest as DOE is presently unable to accurately plan and analyze the market as a result of this overhang and approving more authorizations will create a larger gap.

B. Environmental Impacts

In addition to immediate harms caused by price increases, LNG exports will cause environmental harm lasting for generations which weighs against the public interest. These include impacts occurring across the entire LNG lifecycle, which both the NGA and NEPA require DOE to consider. DOE must reject Gulfstream LNG’s claim that this project may be categorically excluded from NEPA review, and DOE must revisit its deeply flawed analysis of the climate impacts of LNG exports.

⁵² See U.S. Dep’t of Energy, Policy Statement on Export Commencement Deadlines in Authorizations to Export Natural Gas to Non-Free Trade Agreement Countries, 88 Fed. Reg. 25,272 (signed on Apr. 21, 2023), available at https://www.energy.gov/sites/default/files/2023-04/Commencement%20Ext.%20Policy%20Statement%20-%20FINAL%2004-21-23%20signed%20with%20blurb_0.pdf

⁵³ *Id.* at 15.

⁵⁴ *Id.*

⁵⁵ *Id.* at 16.

1. DOE must consider the entire LNG lifecycle.

Both the NGA 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 NGA, 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 NGA'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.⁵⁶

Similarly, NEPA's statutory text requires agencies to consider the "effects" of proposed actions.⁵⁷ 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."⁵⁸ Accordingly, cases have interpreted this language to mean that the statute itself requires consideration of both direct and indirect effects.⁵⁹ The plain meaning of "effects" includes indirect but foreseeable or intended consequences, such as effects proximately caused by the action.⁶⁰ And here, where Gulfstream LNG has repeatedly identified stimulating U.S. gas production and overseas

⁵⁶ 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).

⁵⁷ 42 U.S.C. § 4332(2)(F).

⁵⁸ *Id.*

⁵⁹ *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).

⁶⁰ 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 decision making, even if that effect could, in the tort sense, be said to be someone else's fault.

gas use as purposes of the project,⁶¹ these are plainly “effects” of the authorization of increased exports.

Accordingly, recently reinstated 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.”⁶² And even under the prior regulations adopted in September 2020, which omitted this explicit requirement, the Council on Environmental Quality had conceded that indirect effects that “have a reasonably close causal relationship to the proposed action” must be considered.⁶³ Thus, while NEPA’s statutory text would require consideration of foreseeable effects across the lifecycle regardless of the Council on Environmental Quality’s position, here, the regulations and agency interpretations thereof support this view.

In summary, both the Natural Gas Act and NEPA require DOE to evaluate and weigh environmental impacts occurring through the LNG lifecycle. Thus, DOE must examine the impacts of increasing the export capacity of LNG and the effects that will have on the environment.

2. The proposed exports cannot be categorically excluded from NEPA review.

Gulfstream LNG argues⁶⁴ that its proposed export expansion qualifies for a categorical exclusion that DOE adopted in December 2020, codified at 10 C.F.R. Part 1021 Part D Appendix B, B5.7. Adoption of this categorical exclusion was arbitrary and unlawful, and DOE cannot rely on this categorical exclusion here. Alternatively, this proposal lacks the integral elements of an exempt project and presents extraordinary circumstances, precluding reliance on a categorical exclusion here.

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

⁶¹ Gulfstream LNG Authorization Application, *supra* note 1 at 6-12.

⁶² 40 C.F.R. § 1508.1(g)(2).

⁶³ Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304-01, 43,331 (July 16, 2020).

⁶⁴ Gulfstream LNG Authorization Application, *supra* note 1 at 12-14.

impacts resulting from actions occurring [before] the point of export” because “the agency has no authority to prevent” these impacts, citing *Sierra Club v. FERC*, 827 F.3d 36 (D.C. Cir. 2016) (“*Freeport I*”).⁶⁵ This is the exact opposite of *Freeport I*’s explicit and central holding. *Freeport I* held that **FERC** had no authority to prevent these impacts, specifically because **DOE** had retained “exclusive” authority to do so.⁶⁶ 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.”⁶⁷ 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 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.⁶⁸ 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.⁶⁹ Insofar as DOE contends that these impacts can be difficult to foresee, that affirms, rather than refutes, the need for case-by-case analysis.⁷⁰ Even if DOE determines that upstream

⁶⁵ 85 Fed. Reg. at 25,341; accord Final Rule, 85 Fed. Reg. 78,197, 78,198.

⁶⁶ 827 F.3d at 40-41, 46.

⁶⁷ *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.

⁶⁸ Final Environmental Addendum at 27-28.

⁶⁹ 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. (attached as Exhibit O).

⁷⁰ *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).

impacts can only be discussed generally, in something like the Environmental Addendum, this does not dictate 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.⁷¹ This is again incorrect: DOE has authority to consider these impacts when making its public interest determination, and DOE has not shown that these impacts are so unforeseeable that they cannot be meaningfully discussed at all. Indeed, DOE has refuted this argument itself, 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.⁷² This is legally and factually incorrect. LNG exports are rapidly expanding, and this expansion depends upon and is caused by authorizations like the one Gulfstream LNG has requested here. Moreover, the term extension here will result in expanded operations through 2050, requiring DOE to examine the future prospects for marine vessel traffic in light of projected LNG development. In addition, 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 Gulfstream LNG's proposed 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.

⁷¹ 85 Fed. Reg. at 78,202.

⁷² The proposed rule ignored wildlife impacts entirely.

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.”⁷³ These requirements have some conceptual overlap but are distinct and must be separately considered.⁷⁴ Here, the proposed exports violate 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.”⁷⁵ This integral element is missing whenever a proposal threatens a violation; if there is a possibility of such a violation, a project-specific NEPA analysis is required to evaluate that risk.

Here, increased exports threaten a violation of Executive Order 14,008, Tackling the Climate Crisis at Home and Abroad.⁷⁶ This order—like the Paris Accord, recent Glasgow Pact, and other commitments—affirms that “Responding to the climate crisis will require ... net-zero global emissions by mid-century or before.”⁷⁷ Increasing exports through mid-century (i.e., 2050) is inconsistent with any plausible trajectory for achieving this goal, as recognized by the IEA.⁷⁸ Even if DOE somehow contends that expanded exports can somehow be reconciled with the President’s climate goals and policies, that surprising 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

⁷³ 10 C.F.R. § 1021.410(b).

⁷⁴ *Oak Ridge Env’t Peace All. v. Perry*, 412 F. Supp. 3d 786, 846 (E.D. Tenn. 2019).

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

⁷⁶ 86 Fed. Reg. 7619 (Jan. 27, 2021).

⁷⁷ *Id.* § 101, 86 Fed. Reg. at 7619.

⁷⁸ Net Zero by 2050, *supra* note 7, at 102-03.

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.⁷⁹ The proposed Gulfstream LNG facility will further impact the endangered pallid sturgeon, the threatened giant manta ray, threatened oceanic whitetip shark, and endangered Rice’s whale (formerly designated as the Gulf of Mexico population of the Bryde’s whale). These species are all at risk from ship strikes and noise from vessel traffic, impacts that will be increased by the proposed additional exports.⁸⁰ 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 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,⁸¹ sea turtles,⁸² and giant manta rays.⁸³ Ship traffic also causes noise, which “can negatively impact ocean animals and ecosystems in complex ways.”⁸⁴ 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.”⁸⁵ Unsurprisingly, many animals display a suite of stress-related responses to increased noise. Because the proposed export increase will increase these impacts, the application

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

⁸⁰ 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.

⁸¹ 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 as Exhibit P).

⁸² National Oceanic and Atmospheric Administration Fisheries, *Understanding Vessel Strikes* (June 25, 2017), available at <https://www.fisheries.noaa.gov/insight/understanding-vessel-strikes> (attached as Exhibit Q).

⁸³ National Oceanic and Atmospheric Administration Fisheries, *Giant Manta Ray*, <https://www.fisheries.noaa.gov/species/giant-manta-ray> (attached as Exhibit R).

⁸⁴ National Oceanic and Atmospheric Administration, *Cetacean & Sound Mapping: Underwater Noise and Marine Life*, <http://cetsound.noaa.gov/index> (attached as Exhibit S).

⁸⁵ *Id.*

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.”⁸⁶

One such extraordinary circumstance is that Gulfstream LNG is proposed to be sited adjacent to the Plaquemines LNG and Delta LNG export facilities. Without proper air monitoring in this community, the emissions from these three facilities and the LNG vessel carriers will likely result in violations of health based National Ambient Air Quality Standards—indeed, modeling for Plaquemines LNG already shows the Parish is exceeding federal ambient air quality standard for 1-hour NO_x emissions.⁸⁷ Even if FERC, rather than DOE, takes the lead in reviewing the cumulative impacts of these facilities and associated emissions, 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 categorical exclusion and skip project specific NEPA analysis entirely.⁸⁸

Another extraordinary circumstance is Gulfstream LNG’s proposal that it “may also deliver LNG to domestic markets via smaller ship and barge LNG vessels, as well as LNG tanker trucks.”⁸⁹ “Extraordinary circumstances” include a specific proposal’s “uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternative uses of available resources.” Gulfstream LNG’s vague proposition that it may also engage in shipping or trucking LNG elsewhere in the United States (though it is unclear whether it would stay here) means that the proposal is replete with “uncertain effects” and “unique or unknown risks.” For example, there is patent uncertainty of risk and effect associated with shipping unknown quantities of LNG upstream

⁸⁶ 10 C.F.R. § 1021.410(b)(2).

⁸⁷ See Louisiana Department of Environmental Quality, Prevention of Significant Deterioration (PSD) Permit, PSD-LA-808, Plaquemines LNG Venture Global Plaquemines LNG, LLC & Venture Global Gator Express, LLC West Pointe a la Hache, Plaquemines Parish, Louisiana, at pg. 8 of 226, available at <https://edms.deq.louisiana.gov/app/doc/view?doc=11624911> (attached as Exhibit T); see also Kafka, S., *Plaquemines LNG, Plaquemines Parish, Louisiana, Evaluation of Compliance with the 1-hour NAAQS for NO₂*, Wingra Engineering (May 25, 2022) (attached as Exhibit U).

⁸⁸ 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).

⁸⁹ Gulfstream LNG Authorization Application, *supra* note 1 at 3 n.1.

on the Mississippi River, past major urban populations (including New Orleans and Baton Rouge, Louisiana) and through one of the most heavily polluted petrochemical and oil and gas storage corridors in the country where people already bear disproportionate pollution burdens. Moreover, on its face, this proposal risks pitting LNG export against domestic delivery of methane gas or LNG, presenting an unresolved conflict on the alternative uses for gas methane as well as LNG.

Additionally, the proposed siting of this project creates an extraordinary circumstance which will likely result in significant environmental effects. Gulf Stream LNG will likely face foreseeable construction delays as a result of storms and hurricanes, which are common and frequent in Southeast Louisiana. The storms and hurricanes will increase risks to the environment and community during the construction and operation of this proposed facility.

C. DOE’s prior lifecycle greenhouse gas analyses are not a substitute for NEPA review, and do not demonstrate that greenhouse gas emissions 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.⁹⁰ 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.

1. The lifecycle analyses ask the wrong questions.

Gulfstream LNG’s seeks authorization to export gas through 2050. DOE therefore must take a hard look at the environmental impact of expanded exports of LNG across that nearly 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 analyses do not address this issue. That is, the analyses do not provide any discussion of whether increasing or extending 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.

⁹⁰ *E.g.*, 85 Fed. Reg. at 78,202 (The life cycle “reports are not part of DOE’s NEPA review process”).

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?”⁹¹ 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 nearly 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 IEA,⁹² IPCC,⁹³ 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.”⁹⁴ 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.

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 cause some gas-to-coal shifting in the U.S. electric sector.⁹⁵ Similarly, DOE has acknowledged that “U.S. LNG Exports may ... compete with renewable energy ... as well as efficiency and conservation measures” in overseas markets.⁹⁶

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

⁹² Net Zero by 2050, *supra* note 7, at 101-02.

⁹³ 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/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf (attached as Exhibit V).

⁹⁴ Executive Order 14,008 at § 102(f), (h).

⁹⁵ U.S. Energy Information Agency, *Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets* (Oct. 2014) at 12, 19, available at <https://www.eia.gov/analysis/requests/fe/pdf/lng.pdf> (attached as Exhibit W).

⁹⁶ DOE/FE Order 3638 at 202-03.

As discussed in Section 3 above, Europe is already taking steps to increase renewable energy and conservation in order to reduce its reliance on gas from any source. 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, such that U.S. LNG exports are likely to increase net global GHG emissions.⁹⁷

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. 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."⁹⁸ Requiring nations to measure and report territorial 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.

2. The 2019 and 2014 lifecycle analyses underestimate emissions.

In addition to asking the wrong questions, DOE's prior lifecycle analyses are factually unsupported and understate emissions. For example, 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%

⁹⁷ 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 as Exhibit X).

⁹⁸ Witi, J. & Romano, D., 2019 Refinement to the 2006 IPCC Guidelines for 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 (attached as Exhibit Y).

of the gas delivered.⁹⁹ 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%.¹⁰⁰ As we have previously 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.¹⁰¹ 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.¹⁰² At a minimum, DOE must review and respond to this research before approving any further LNG export applications.

a) *DOE must consider substantial new information released by the IPCC and NOAA.*

DOE must also address mounting scientific evidence highlighting the severe need to curb greenhouse gas emissions now and the substantial risk of extreme weather events facing infrastructure like Gulfstream LNG along the Gulf Coast. Specifically, DOE must address the 2022 National Oceanic and Atmospheric Administration (“NOAA”) Report on sea level rise and three recent documents from the IPCC’s 6th Assessment Report (“AR6”)—issued after DOE’s 2020 Policy Statement—that paint a staggering picture of a climate-destabilized future absent urgent and aggressive carbon emission reductions.

⁹⁹ Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States: 2019 Update at 27, available at <https://fossil.energy.gov/app/docketindex/docket/index/21>.

¹⁰⁰ 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 as Exhibit Z); *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-three-times-national-rate> (attached as Exhibit Z-1).

¹⁰¹ 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> (attached as Exhibit Z-2).

¹⁰² *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 as Exhibit Z-3); Kayros, *U.S. Methane Emissions from Fossil Fuels at Risk of Worsening In 2022, Extending 2021 Trend* (June 2022) (attached as Exhibit Z-4).

i. 2022 NOAA Report on sea level rise

In its 2022 report, NOAA concluded sea level will rise due to climate change by one foot by 2050.¹⁰³ The 2022 NOAA sea level rise data is significant new information because Louisiana has the highest relative rise in sea level of anywhere in the U.S.;¹⁰⁴ storms and hurricanes are common in Louisiana and could happen at any time, as aptly demonstrated by the 2020 and 2021 hurricane seasons; and Gulfstream LNG is at risk of serious flooding.¹⁰⁵ The 2022 NOAA report also predicts an “increase in the frequency of coastal flooding, even in the absence of storms or heavy rainfall.”¹⁰⁶ This, combined with a subsidence rate of over 22 mm per year—the highest rates along the western Gulf states—makes sea level rise a climate and safety problem.¹⁰⁷ DOE must consider the 2022 NOAA report in its public interest analysis and NEPA review.

ii. IPCC’s 6th assessment report

Similarly the IPCC’s August 2021 *The Physical Science Basis* report confirms that “[h]uman-induced climate change is already affecting many weather and climate extremes in every region across the globe.”¹⁰⁸ Evidence demonstrating the link between human greenhouse gas emissions and

¹⁰³ See *U.S. coastline to see up to a foot of sea level rise by 2050*, National Oceanic and Atmospheric Administration, available at <http://www.noaa.gov/news-release/us-coastline-to-see-up-to-foot-of-sea-level-rise-by-2050> (Feb. 15, 2022) (attached as Exhibit Z-5) (hereinafter “U.S. Sea Level Rise”).

¹⁰⁴ “[A] federal study from NOAA . . . points out that the Gulf of Mexico from Texas to Louisiana is likely to see the highest sea-level rise in the contiguous United States. And flooding will likely become more intense and more frequent.” See Mike Lee, *U.S. LNG surge may have a flood problem*, E&E News (June 8, 2022) (attached as Exhibit Z-6).

¹⁰⁵ “An 8-foot wall of water easily swept over the meager 3 to 6 feet of levee protection on Ironton’s marsh side [during Hurricane Ida].” Halle Parker, In lower Plaquemines Parish, Ida’s storm surge isolated residents, floats tombs, houses, Nola.com (Sept. 2, 2021); Plaquemines LNG stated that the plant would be operational by middle 2025, but “the company told federal regulators it had ‘experienced several delays due to severe weather,’ which resulted in ‘slower overall construction progress.’” Joshua Rosenberg, ‘Severe’ weather delays LNG plant’s construction. How will the Gulf plant fare with rising seas and supercharged storms?, TheLensNola (Feb. 15, 2023), available at <https://thelensnola.org/2023/02/15/severe-weather-delays-lng-plants-construction-how-will-the-gulf-plant-fare-with-rising-seas-and-supercharged-storms%E2%82%AC/>.

¹⁰⁶ U.S. Sea Level Rise, *supra* note 103.

¹⁰⁷ Dokka, R., Shinkle K., *Rates of vertical displacement at benchmarks in the lower Mississippi Valley and the North Gulf Coast*, NOAA (July 2004), <http://geodesy.noaa.gov/heightmod/NOAANOSNGSTR50.pdf> (attached as Exhibit Z-7).

¹⁰⁸ See *Climate Change 2021: The Physical Science Basis, Summary for Policymakers*, IPCC, available at https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (Oct. 2021) (attached as Exhibit Z-8) (hereinafter “IPCC Physical Science Summary”).

“changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones . . . has strengthened since” the prior IPCC report.¹⁰⁹ In addition to exacerbating extreme weather, “[h]eating of the climate system has caused global mean sea level rise through ice loss on land and thermal expansion from ocean warming.”¹¹⁰ The IPCC forecasts with *high confidence* that flooding will become more likely in coastal cities due to “the combination of more frequent extreme sea level events (due to sea level rise and storm surge).”¹¹¹ Even under deep emission reductions scenarios that keep global warming to within 1.5°C, the report finds that “heavy precipitation and associated flooding are projected to intensify and be more frequent in most regions,” including North America (*medium to high confidence*).¹¹²

Looking to the future, *The Physical Science Basis* also concludes that cutting greenhouse gas emissions now is critical because “there is a near-linear relationship” between human-caused greenhouse gas emissions and related global warming, meaning that each additional increment of global warming exacerbates changes in extreme weather events. For example, the IPCC forecasts that each additional 1°C of global warming will cause about a 7 percent increase in the intensity of extreme daily precipitation events (*high confidence*).¹¹³ Based on this demonstrated relationship, the IPCC concludes that “reaching net zero anthropogenic CO₂ emissions is a requirement to stabilize human-induced global temperature increase at any level.”¹¹⁴

Additionally, the IPCC’s February 2022 report—on *Impacts, Adaptation, and Vulnerability*—highlights the increasing climate-related risks to coastal infrastructure like Gulfstream LNG. Because “[c]limate change impacts and risks are becoming increasingly complex and more difficult to manage,” it is increasingly likely that “[m]ultiple climate hazards will occur

¹⁰⁹ *Id.* at 8, A.3.

¹¹⁰ *Id.* at 11, A.4.3.

¹¹¹ *Id.* at 25, C2.6.

¹¹² *Id.* at C.2.2. With 2°C or more of global warming, changes in droughts and heavy and mean precipitation will be even more dramatic. *Id.* at C.2.3.

¹¹³ *Id.* at 16, B.2.4. The IPCC reports that “every additional 0.5°C of global warming causes clearly discernible increases in the intensity and frequency of hot extremes, including heatwaves (*very likely*), and heavy precipitation (*high confidence*), as well as agricultural and ecological droughts in some regions (*high confidence*).” *Id.* at 15, B.2.2.

¹¹⁴ *Id.* at 28, D.1.1.

simultaneously, . . . compounding overall risk[.]”¹¹⁵ Noting that “[w]idespread, pervasive impacts to ecosystems, people, settlements, and infrastructure have resulted from observed increases in the frequency and intensity of climate and weather extremes,”¹¹⁶ the IPCC also predicts, with high to very high confidence, that climate change will cause increasing adverse impacts from flood/storm damages in coastal areas, damage to key infrastructure, and damage to key economic sectors in North America.¹¹⁷ Moreover, “[u]navoidable sea level rise will bring cascading and compounding impacts resulting in losses of coastal ecosystems and ecosystem services, groundwater salinisation, flooding and damages to coastal infrastructure that cascade into risks to livelihoods, settlements, health, well-being, food and water security, and cultural values in the near to long-term (high confidence).”¹¹⁸

The IPCC again concludes, with *very high confidence*, that “[t]he magnitude and rate of climate change and associated risks depend strongly on near-term mitigation and adaptation actions, and projected adverse impacts and related losses and damages escalate with every increment of global warming.”¹¹⁹ If overall global warming reaches 1.5°C in the near-term, there would be “unavoidable increases in multiple climate hazards” that would “present multiple risks to ecosystems and humans (very high confidence).” Although “[n]ear-term actions that limit global warming to close to 1.5°C would substantially reduce projected losses and damages related to climate change in human systems and ecosystems,” the IPCC confirmed that, at this point, those actions cannot eliminate all of the harms (very high confidence).¹²⁰

¹¹⁵ See IPCC, *Climate Change 2022 Impacts, Adaptation and Vulnerability, Summary for Policy Makers* at 18, B.5, available at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf (Feb. 2022) (attached as Exhibit Z-9) (hereinafter “IPCC Impacts Summary”).

¹¹⁶ *Id.* at SPM.B.1.1; *see also id.* at SPM.C.2.5 (“Natural river systems, wetlands and upstream forest ecosystems reduce flood risk by storing water and slowing water flow, in most circumstances (high confidence). Coastal wetlands protect against coastal erosion and flooding associated with storms and sea level rise where sufficient space and adequate habitats are available until rates of sea level rise exceeds natural adaptive capacity to build sediment (very high confidence).”).

¹¹⁷ *Id.* at Figure SPM.2. Risks from climate change to “key infrastructure will rise rapidly in the mid- and long-term with further global warming, especially in places . . . along coastlines, or with high vulnerabilities (high confidence).” *Id.* at SPM.B.4.5.

¹¹⁸ *Id.* at SPM.B.5.2.

¹¹⁹ *Id.* at SPM.B.4.

¹²⁰ *Id.* at SPM.B.3.

Because climate change impacts cannot be eliminated entirely, the IPCC also highlights critical adaptation strategies, including restoring wetlands to “further reduce flood risk (medium confidence).”¹²¹ Noting that “siting of infrastructure” and other factors have “contributed to the exposure of more assets to extreme climate hazards increasing the magnitude of the losses (high confidence),”¹²² the IPCC also concludes that “[a]ctions that focus on sectors and risks in isolation and on short-term gains often lead to maladaptation if long-term impacts of the adaptation option and long-term adaptation commitment are not taken into account (high confidence).”¹²³

Lastly, the IPCC’s April 2022 *Mitigation of Climate Change* report¹²⁴ further demonstrates that LNG exports will need to be significantly curtailed well before 2050. For example, the IPCC concludes that, to remain consistent with current internal climate pledges, global greenhouse gas emissions reductions must undergo “an unprecedented acceleration” between 2030 and 2050 (medium confidence).¹²⁵ Without additional abatement, projected greenhouse gas “emissions over the lifetime of existing and currently planned fossil fuel infrastructure” will result in global warming over 1.5°C.¹²⁶ Moreover, to reduce greenhouse gas emissions, the energy sector will “require[] major transitions, including a substantial reduction in overall fossil fuel use, the deployment of low-emission energy sources, switching to alternative energy carriers, and energy efficiency and conservation.”¹²⁷ On the other hand, “[t]he continued installation of unabated fossil fuel infrastructure will ‘lock-in’ [greenhouse gas] emissions” (high confidence).¹²⁸ The required transition in the energy sector “is projected to reduce international trade in fossil fuels.”¹²⁹ Because

¹²¹ *Id.* at SPM.C.2.1.

¹²² IPCC Impacts Summary, *supra* note 115, at SPM.B.1.6.

¹²³ *Id.* at SPM.C.4.1.

¹²⁴ See IPCC, *Climate Change 2022: Mitigation of Climate Change, Summary for Policy Makers*, available at https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SPM.pdf (Apr. 2022) (attached as Exhibit Z-10).

¹²⁵ *Id.* at B.6.3.

¹²⁶ *Id.* at B.7.

¹²⁷ *Id.* at C.4.

¹²⁸ *Id.*

¹²⁹ *Id.* at C.4.4.

limiting warming to 2°C “could strand considerable fossil fuel infrastructure,” the IPCC estimates that gas assets “are projected to be more at risk of being stranded towards mid-century” (high confidence),¹³⁰ reiterating the risk that new LNG facilities like Gulfstream must cease operations well before 2050.

In short, the IPCC’s AR6 reports add to the mounting evidence demonstrating the dual climate risks associated with the Gulfstream LNG facility: (1) that the facility’s staggering greenhouse emissions will fuel climate change, and (2) that the climate-driven hazards at the project site will increase the risk of significant contamination being released into the surrounding communities and ecosystems. DOE must consider this significant new information in its public interest analysis and NEPA review.

III. Conclusion

For the reasons stated above, the Environmental Advocates’ motion to intervene should be granted. The authorization request is not consistent with the public interest and should be denied. At a minimum, DOE must not approve the application without reviewing whether recent gas price spikes call into question DOE’s prior analyses and assumptions about the effects of increased exports on domestic gas production and prices. Finally, DOE cannot approve the request 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 authorized period. Extending gas exports and use cannot be reconciled with those goals. Consequently, this request should be denied.

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¹³⁰ *Id.*

IN THE MATTER OF)
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 Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
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Pursuant to 10 C.F.R. § 590.107, I, Lisa Diaz, 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 June 13, 2023.

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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
)

SIERRA CLUB CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

Pursuant to 10 C.F.R. § 590.103(b), I, Lisa Diaz, 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 New Orleans, LA this 13 day of June, 2023

/s/ Lisa Diaz

Lisa Diaz

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Attorney for Sierra Club

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
)

SIERRA CLUB VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Lisa Diaz, 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 New Orleans, LA on June 13, 2023

/s/ Lisa Diaz

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IN THE MATTER OF)
)
 Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
)

Pursuant to 10 C.F.R. § 590.103(b), I, Raleigh Hoke, hereby certify that I am a duly authorized representative of the Healthy Gulf, 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 Healthy Gulf, the foregoing documents and in the above captioned proceeding.

/s/ Raleigh Hoke
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Campaign Director for Healthy Gulf

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
)

HEALTHY GULF VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Raleigh Hoke, 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 New Orleans, LA on June 13, 2023

/s/ Raleigh Hoke

Raleigh Hoke

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Campaign Director for Healthy Gulf

IN THE MATTER OF)
)
 Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
)

Pursuant to 10 C.F.R. § 590.103(b), I, Shreyas Vasudevan, hereby certify that I am a duly authorized representative of the Louisiana Bucket Brigade, 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 Louisiana Bucket Brigade, the foregoing documents and in the above captioned proceeding.

/s/ Shreyas Vasudevan
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Campaign Coordinator for Louisiana Bucket Brigade

IN THE MATTER OF)
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 Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
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IN THE MATTER OF)
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Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
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**DEEP SOUTH CENTER FOR ENVIRONMENTAL JUSTICE CERTIFIED STATEMENT
OF AUTHORIZED REPRESENTATIVE**

Pursuant to 10 C.F.R. § 590.103(b), I, Monique Harden, hereby certify that I am a duly authorized representative of Deep South Center for Environmental Justice, and that I am authorized to sign and file with the Department of Energy, Office of Fossil Energy and Carbon Management, on behalf of Deep South Center for Environmental Justice, the foregoing documents and in the above captioned proceeding.

Dated at New Orleans, LA this 13 day of June, 2023

/s/ Monique Harden

Monique Harden

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Director of Law and Policy for Deep South Center for Environmental Justice

IN THE MATTER OF)
)
 Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
)

Pursuant to 10 C.F.R. § 590.103(b), I, Monique Harden, 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.

Director of Law and Policy for Deep South Center for Environmental Justice

IN THE MATTER OF)
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 Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Gulfstream LNG Development, LLC) FE Docket Nos. 23-34-LNG
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SUNRISE MOVEMENT VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Benjamin Hoffman, 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 New Orleans, LA on June 13, 2023

/s/ Benjamin Hoffman

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Campaign Manager for Sunrise Movement, New Orleans Chapter