

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

Motion to Intervene and Protest of For a Better Bayou, Habitat Recovery Project, Healthy Gulf, Louisiana Bucket Brigade, Micah Six Eight Mission, and Sierra Club

Lake Charles Exports LLC (“LCE”), a subsidiary of Energy Transfer, is proposing to develop a liquified natural gas (“LNG”) export facility (“Lake Charles LNG Project”) on the site of an existing LNG import facility, located roughly 10 miles Southwest of central Lake Charles in Calcasieu Parish, Louisiana.

LCE (along with another Energy Transfer subsidiary, Lake Charles LNG Export) previously obtained authorization from the Department of Energy (“DOE”) to export LNG from the Lake Charles LNG Project to “non-free trade agreement” (“non-FTA”) countries.¹ Consistent with DOE’s standard practice, the authorizations required the companies to commence exports within seven-years.² In 2022, after granting one prior extension of the commencement deadline,³ DOE denied a second extension due to the developers’ lack of progress on the project.⁴ Now,

¹ DOE/FE Order 3324-A (July 29 2016), <https://www.energy.gov/sites/prod/files/2016/07/f33/ord3324a.pdf> (LCE Non-FTA Authorization); DOE/FE Order 3868 (July 29, 2016), <https://www.energy.gov/sites/prod/files/2016/07/f33/ord3868.pdf> (Lake Charles LNG Export non-FTA authorization); DOE/FE Order 4011 (June 29, 2017), <https://www.energy.gov/sites/prod/files/2017/06/f35/ord4011.pdf> (LCE non-FTA increase); DOE/FE Order 4010 (June 29, 2017), <https://www.energy.gov/sites/prod/files/2017/06/f35/ord4010.pdf> (Lake Charles LNG Export non-FTA increase).

² Order 3324-A at 144; Order 4011 at 47; Order 3868 at 156; Order 4010 at 48.

³ DOE/FE Order 2987-A, 3324-A, & 4011-A (Oct. 6, 2020), https://www.energy.gov/sites/prod/files/2020/10/f79/ord2987a%2C%203324b%2C%204011a_0.pdf (granting LCE’s first extension); DOE/FE Order 3252b, 3868a, & 4010a (Oct. 6, 2020), <https://www.energy.gov/sites/prod/files/2020/10/f79/ord3252b%2C%203868a%2C%204010a.pdf> (granting Lake Charles LNG Export’s first extension).

⁴ DOE/FECM Order Nos. 3324-C/4011-B (Apr. 21, 2023), https://www.energy.gov/sites/default/files/2023-04/ord3324-C_4011-B.pdf [hereinafter “Lake Charles LNG Export Extension Denial”]; DOE/FECM Order Nos. 3868-B/4010-B (Apr. 21, 2023), https://www.energy.gov/sites/default/files/2023-04/ord3868-C_4010-B.pdf [hereinafter “LCE Extension Denial”]. DOE subsequently denied rehearing of those orders. DOE/FECM Order No. 3868-C/4010-C (June 21, 2023), https://www.energy.gov/sites/default/files/2023-06/_ord3868-C_4010-C.pdf (denying Lake Charles LNG Export’s rehearing request); DOE/FECM Order No. 3324-D/4011-C (June 21, 2023),

LCE seeks to reset the clock for it to commence exports by filing a new application for authorization to export LNG from the Lake Charles LNG Project.⁵

Concurrently with this denial, DOE issued a Policy Statement (that it did not apply to LCE's second extension request) reinforcing its standard practice of requiring operators to commence exports within seven-years, in part because the determinations underlying initial authorizations become stale over time.⁶ DOE also recognized that allowing projects that are clearly not moving forward to continue to hang on to their export authorizations creates a "authorization overhang" that unnecessarily clouds forecasting about LNG exports and may deter newer entrants with projects utilizing newer technology and better environmental justice practices.⁷ The same policy considerations that warrant letting failing projects' authorizations expire also warrant not authorizing projects that have no chance of success in the first place.

The Lake Charles LNG Project is a case study in these policy considerations. The last six years have demonstrated that the Lake Charles LNG Project is failing, as DOE concluded in denying LCE's latest extension request. Yet, LCE now asks DOE to throw that same, faltering project a lifeline. DOE should decline to do so: authorizing this clearly failing project will only contribute to the authorization overhang and deter newer projects, utilizing newer technology.

While LCE is unlikely to proceed even if DOE grants this new application, the Lake Charles LNG Project will never be built without it. Although the existing authorizations remain valid in name, as a practical matter, they are defunct because LCE states that it cannot commence exports before the December 2025 deadline.⁸ LCE also acknowledges that it will likely lose its existing export contracts if it does not obtain this new authorization.⁹ And no project of this size

https://www.energy.gov/sites/default/files/2023-06/LCE%20Rehearing%20Order_GC%20Final%2006.21.23-signed_unlocked_0.pdf (denying LCE's rehearing request).

⁵ If granted, the new authorization would presumably include a new deadline seven years from the issuance date per DOE's standard practice.

⁶ 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 (Apr. 26, 2023) [hereinafter Policy Statement on Extensions] (attached).

⁷ Policy Statement on Extensions at 25,277.

⁸ Lake Charles Exports, LLC, DOE Docket No. 23-87- LNG, Application Long-Term Authorization to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries and Request for Expedited Consideration at 4 (August 18, 2023) [hereinafter "Application"].

⁹ *Id.* at 4.

has ever been built without the non-FTA authorization at issue here.¹⁰ Therefore, DOE must treat this application as an additional source of LNG exports, not merely an extension of exports that would occur otherwise.

For a Better Bayou, Habitat Recovery Project, Healthy Gulf, Louisiana Bucket Brigade, Micah Six Eight Mission, and Sierra Club (collectively “Environmental Advocates”) request to intervene in Docket No. 23-87-LNG.¹¹ The Environmental Advocates herein also protest LCE’s application in the above docket, pursuant to 10 C.F.R. §§ 590.303(b) and § 590.304.

The Environmental Advocates submit these comments at a time when the world’s transition away from fossil fuels is accelerating rapidly. As the Biden administration has repeatedly affirmed, our global strategic interests—including helping Ukraine and other European allies avoid reliance on Russian fossil fuels—requires the U.S. and the world to transition off of fossil fuels entirely as quickly as possible.¹² The International Energy Agency recently concluded that, through the 2040s, there will be no need for LNG exports beyond those already under construction.¹³ The transition away from fossil fuels is also essential to avoid catastrophic climate change: the International Energy Agency has explained that even LNG export projects that are already under construction cannot be part of the path to net-zero emissions.¹⁴ The Lake Charles LNG Project proposal, which would not export gas until 2028

¹⁰ See, e.g., Callum O’Reilly, *Cameron LNG sponsors finalise FID*, LNG INDUSTRY, (Aug. 7, 2014), available at <https://www.lngindustry.com/liquefaction/07082014/cameron-lng-sponsors-finalise-fid-1161/> (attached) (Cameron LNG facility developers waited until after they obtained Department authorization for exports to non-FTA countries before making final investment decision).

¹¹ Although Sierra Club, Healthy Gulf, and Louisiana Bucket Brigade already intervened in prior dockets related to the Lake Charles LNG Project (Docket Nos. 13-04-LNG, 16-109-LNG, 11-59-LNG, and 16-110-LNG), DOE has created a new docket in response to LCE latest application. Therefore, these entities additionally seek intervention in the newest docket related to exports from the project.

¹² See, e.g., Remarks by President Biden Announcing U.S. Ban on Imports of Russian Oil, Liquefied Natural Gas, and Coal (Mar. 8, 2022), available at <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/03/08/remarks-by-president-biden-announcing-u-s-ban-on-imports-of-russian-oil-liquefied-natural-gas-and-coal/> (attached), and Jen Psaki, <https://twitter.com/PressSec/status/1500587980699971586?s=20>, (“real energy security comes from reducing our dependence on fossil fuels.”).

¹³ International Energy Agency, *World Energy Outlook 2023* at 139 (Oct. 2023), available at <https://www.iea.org/reports/world-energy-outlook-2023> (attached).

¹⁴ *Id.*; see also 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 “IEA, Net Zero by 2050”] (attached) (expanded LNG exports cannot be part of a net-zero future).

under the developer's optimistic schedule, is not a part of any solution to our short, middle, or long term problems.

LCE contends that this new authorization is warranted because DOE previously approved exports from this project. But DOE must review this new application based on current information and data in this docket.¹⁵ Current circumstances include LCE's history of extension requests and its failure to move this project forward in nearly a decade since it was first proposed—those circumstances alone demonstrate that this faltering project is not worth endorsing. The Lake Charles LNG Project's proposed location will also exacerbate disproportionate impacts on environmental justice communities in the Lake Charles area: the project will be surrounded by low-income communities and communities of color, in a region that already has extensive industrial pollution impacts. DOE must consider the cumulative harms these communities will suffer if this project moves forward. Moreover, LCE's cursory application fails to address significant developments in technology, global LNG markets, domestic energy landscape, and scientific tools to address climate change risks since it first applied in 2013. LCE's heavy reliance on DOE's stale prior findings, and its failure to address these recent developments, are fatal to its application.

As explained below, current circumstances demonstrate that the Lake Charles LNG Project is inconsistent with the public interest, and LCE's application should be denied. 15 U.S.C. § 717b(a).

I. Intervention

DOE's rules do not articulate any particular standard for timely intervention, and as such, 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, the Environmental Advocates' position is that the application should be denied or, in the alternative, cannot be approved without additional analysis far beyond that presented in LCE's cursory application. The organizations' interests are based on the impact the proposed Lake Charles LNG Project will have on their members and missions.

¹⁵ 88 Fed. Reg. 25,277 ("[N]ew DOE decisions regarding non-FTA exports, such as actions in response to the pending expiration of an authorization holder's export commencement deadline, should be made on the basis of the latest market information and analytical approaches available at the time of DOE's decision.").

1. Sierra Club

The requested extension will harm Sierra Club's members by increasing the prices they pay for energy, including both gas and electricity, over a longer term. The project developers have noted that, absent the requested new authorization, the export authorization for the Lake Charles LNG Project will lapse, preventing the project from reaching a final investment decision or being constructed. Thus, granting this application would facilitate gas exports that would otherwise not occur. 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. Sierra Club's members will pay more for energy if DOE grants this application.

The requested extension 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,¹⁶ and increasing gas production increases ozone pollution, including risking creation of new or expanded ozone non-attainment areas or exacerbating existing non-attainment.¹⁷ As noted, these impacts are unlikely to occur unless DOE grants LCE's application. Sierra Club has over 2,900 members in Louisiana, including many in the Barnett Shale region and other areas that will likely be impacted by increased gas production.

The proposed Lake Charles LNG Project will also require significant shipping traffic. This vessel or tanker traffic will emit air pollutants such as carbon monoxide and ozone-forming nitrogen oxides. Increased ship traffic will also harm wildlife that each organization's members enjoy viewing, etc., including the recently-listed threatened giant manta ray,¹⁸ threatened oceanic

¹⁶ 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.”) (attached).

¹⁷ U.S. DOE, *Final Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States* at 27-32 (Aug. 2014), available at <https://www.energy.gov/sites/prod/files/2014/08/f18/Addendum.pdf>.

¹⁸ Final Rule to List the Giant Manta Ray as Threatened Under the Endangered Species Act, 83 Fed. Reg. 2,916 (Jan. 22, 2018).

whitetip shark,¹⁹ and endangered Rice's whale (formerly designated as the Gulf of Mexico population of the Bryde's whale).²⁰

The proposed exports will also require new infrastructure with significant direct environmental impacts, including air pollution emissions. These emissions will impact Sierra Club members and others who live, work, or recreate in the vicinity of the proposed project.

Finally, increasing LNG exports by granting this application will impact Sierra Club and its members because of the additional greenhouse gases emitted throughout the LNG lifecycle, from production, transportation, liquefaction, and end use. *See Section II.B.3.* The impacts from climate change are already harming Sierra Club 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.

In summary, the requested extension will harm Sierra Club 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:

Louisa Eberle
Staff Attorney
1536 Wynkoop St. Suite 200
Denver, CO 80202
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415-977-5753

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¹⁹ Listing the Oceanic Whitetip Shark as Threatened Under the Endangered Species Act, 83 Fed. Reg. 4,153 (Jan. 30, 2018).

²⁰ Technical Corrections for the Bryde's Whale (Gulf of Mexico Subspecies), 86 Fed. Reg. 47,022 (Aug. 23, 2021).

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2. For a Better Bayou

For a Better Bayou is a community-based organization in Southwest Louisiana which is raising awareness and building a community-based movement to ensure protections for a sustainable bayou. Its mission is to build a movement in Southwest Louisiana that holds the fossil fuel industry accountable for the harm it causes to people and the environment, and transforms the regional economy to one based in love, culture, and environmental stewardship. For a Better Bayou hosts events to educate community members on the global climate crisis and how that impacts Southwest Louisiana and the bayous in the region, which provide a myriad of benefits to the surrounding communities. For a Better Bayou also hosts outings such as bird walks to educate the community on the value of a robust and diverse ecosystem. The construction and operation of the Lake Charles LNG Project will impact For a Better Bayou's work and mission by producing harmful air and water pollution that will deter members from engaging in outdoor activities in the region. For a Better Bayou states that the exact name of the movant is For a Better Bayou.

Pursuant to 10 C.F.R. § 590.303(d), For a Better Bayou identifies the following person for the official service list:

James Hiatt
Director, For a Better Bayou
PO Box 7262
Lake Charles, LA 70606
337-515-0655
James@betterbayou.net

3. Habitat Recovery Project

Habitat Recovery Project states that the exact name of the movant is Habitat Recovery Project, and the movant's principal place of business is 1636 Arledge Rd, Vinton, LA 70668. Habitat Recovery Project is a 501(c)(3) organization and represents a community-focused conservation movement dedicated to restoring, regenerating, and conserving wildlife habitats in contaminated communities, through supporting and benefiting the communities around them. This work will be directly affected by the construction and operation of the Lake Charles LNG Project.

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

Alyssa Portaro
Habitat Recovery Project
1636 Arledge Rd
Vinton, LA 70668
alyssaortaro@gmail.com
973-632-1695

4. 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
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PO Box 66226
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5. Louisiana Bucket Brigade

Louisiana Bucket Brigade states that the exact name of the movant is Louisiana Bucket Brigade, and the movant's principal place of business is 3416 B Canal Street, New Orleans, LA 70119. Louisiana Bucket Brigade is a 501(c)(3) organization with several hundred members in Louisiana, including members in the Lake Charles area who will be impacted by the Project. The Louisiana Bucket Brigade works with communities across the state that are disproportionately impacted by industrial pollution, with the goal of addressing environmental injustices and holding large polluters accountable. Lake Charles LNG is yet another threat to Southwest Louisiana's communities which are already overburdened with toxic emissions from numerous fossil fuel and petrochemical facilities, and we request DOE to reject this export

authorization application. It also employs staff members, primarily based in Louisiana, who work to inform Louisiana residents on the adverse environmental impacts of the petrochemical and oil and gas industry.

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

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Campaign Researcher
3416B Canal St
New Orleans, LA 70130
(504) 484-3433
shreyas@labucketbrigade.org

6. Micah Six Eight Mission

Micah Six Eight Mission states that the exact name of the movant is Micah Six Eight Mission, and the movant's principal place of business is 624 W. Verdine, Sulphur, LA 70663. Micah Six Eight Mission is a 501(c)(3) organization serving the communities in Calcasieu and Cameron parishes. Micah Six Eight Mission, our staff, board and volunteers will be impacted by the Project. We work to inform Louisiana residents on the adverse environmental impacts of the petrochemical and oil and gas industry. Micah Six Eight Mission also supports communities in Calcasieu and Cameron parishes whose health and homes are devastated by the petrochemical industry as well as the oil and gas industry. This work is directly affected by the construction and operation of the Project.

Pursuant to 10 C.F.R. § 590.303(d), Micah Six Eight Mission identifies the following person for the official service list:

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II. Protest

The application should be denied because it is contrary to the public interest. 15 U.S.C. § 717b(a).

As DOE previously explained, “when reviewing an application for export authorization,” DOE evaluates “economic impacts, international impacts, security of natural gas supply, and

environmental impacts, among others.”²¹ LCE’s application heavily relies on DOE’s prior approval of exports from the Lake Charles LNG Project.²² But DOE’s prior authorizations are irrelevant; DOE must evaluate whether this new application meets this standard based on current information in the docket at issue.²³ Here, the last six years have shown that LCE is a bad bet. As DOE has recognized, many of these LNG projects fail to ever amount to anything, and LCE has shown us that it’s one of those projects. DOE shouldn’t re-approve this failing project just to continue to muddy the waters for other potentially viable LNG terminals. DOE must take a fresh look at the Lake Charles LNG Project. Based on current circumstances and the latest market information and analytical approaches available, each of the public interest factors weighs against granting LCE’s new application.

A. DOE Must Base Its Decision on the Latest Information and Analytical Approaches Available.

This new application asks for a new authorization to export LNG to non-FTA countries. The Lake Charles LNG Project cannot proceed without this new authorization. LCE’s application therefore represents a request to export additional LNG, not simply an extension of LCE’s prior authorizations.²⁴

DOE has made clear that “new DOE decisions regarding non-FTA exports” like this “should be made on the basis of the latest market information and analytical approaches at the

²¹ *See, e.g.*, Order No. 4010, at 14-15.

²² *See, e.g.*, Application at 31, 35-37, 39, 43.

²³ 88 Fed. Reg. 25,277 (recognizing that “new DOE decisions regarding non-FTA exports” like the application here, “should be made on the basis of the latest market information and analytical approaches at the time of DOE’s decision”); 10 C.F.R. § 590.404 (“The final opinion and order shall be based solely on the official record of the proceeding and include a statement of findings and conclusions, as well as the reasons or basis for them, and the appropriate order, condition, sanction, relief or denial.”); 10 CFR § 590.106 (“The FE shall maintain a docket file of each proceeding under this part, which shall contain the official record upon which all orders provided for in subparts D and E shall be based.”).

²⁴ For this reason, DOE’s recent Supplemental Analysis regarding a minor change to the export term is irrelevant here. *See* DOE, Supplement Analysis for the Application of Lake Charles LNG Export Company, LLC and Lake Charles Exports, LLC to Extend Their Authorized Export Term Through December 31, 2050 (Nov. 2023). That Supplemental Analysis was issued explicitly limited in scope. *Id.* at 4 (“This Supplement Analysis examines whether the proposed modification—an addition of two years and 15 days to the period of authorized exports—would represent a substantial change to the proposed action or significant new circumstances or information requiring a supplement to the existing EIS.”) Consideration of the Lake Charles LNG Project, in the first instance—which will require construction of extensive liquefaction and related infrastructure—is a much more impactful decision than adding a few years to the project’s export term decades in the future.

time of DOE's decision."²⁵ And here, DOE assigned a new docket number, indicating that DOE is treating this matter as a new proceeding with its own "relevant facts, policy and applicable law concerning the importation or exportation of natural gas."²⁶

LCE's application nevertheless relies heavily on prior DOE determinations in other dockets, specifically DOE's prior findings that, *more than six years ago*, (1) the US had an amply supply of gas for exports without impacting availability for domestic demand, (2) the exports would have a "nominal effect" on domestic gas prices, and (3) economic and public benefits stemmed from the US trade deficit and tax revenues.²⁷ Notably, DOE never found that there was demand for the Lake Charles LNG Project or that it was likely to succeed.²⁸ And recent history suggests that LCE is in fact unlikely to move forward. Regardless, because DOE denied LCE's request for an extension, LCE's prior authorizations are effectively void.²⁹ DOE's prior determinations are therefore irrelevant to the present application: DOE must make new determinations based on the information in LCE's application and this docket.

Even if DOE was inclined to rely on its prior determinations, they are undermined by substantial changes in technology, global markets, domestic energy landscape, and climate change risks since LCE's 2013 application.³⁰ LCE's roughly two-page "justification for action sought" merely restates these prior findings, and does nothing to address these significant developments.³¹ For the reasons explained below, LCE's application is not in the public interest in light of current circumstances and recent evidence.

Refusing to blindly accept prior determinations *in response to a new application* is not a collateral or out-of-time attack on the initial authorizations. The initial authorizations are still

²⁵ 88 Fed. Reg. 25,277.

²⁶ 10 C.F.R. § 590.102(o).

²⁷ Application at 39, 43.

²⁸ See Order 3324a at 139 ("[W]e note that it is far from certain that all or even most of the proposed LNG export projects will ever be realized because of the time, difficulty, and expense of commercializing, financing, and constructing LNG export terminals, as well as the uncertainties inherent in the global market demand for LNG."); Order 3868 at 151 (same); Order 4010 at 42 (same); Order 4011 at 41 (same).

²⁹ LCE Extension Denial, *supra* note 4; Lake Charles LNG Export Extension Denial, *supra* note 4.

³⁰ 88 Fed. Reg. 25,277 ("DOE notes that its public interest analysis supporting each non-FTA authorization under NGA section 3(a) may become stale after seven years, as the natural gas market and supporting analyses continue to evolve.").

³¹ Application at 35-37.

there. Insofar as LCE or any developer wishes to claim the benefit of the original authorizations, they may continue to do so, provided that they commence exports by 2025. But where, as here, a developer asks DOE for a new authorization, that application must be subject to the same standard as any other application to export LNG, based on current information and data. The Supreme Court has explained that agency actions are arbitrary and capricious if, among other things, the agency “entirely failed to consider an important aspect of the problem” or “offered an explanation for its decision that runs counter to the evidence before the agency.”³² In light of the current circumstances, latest analytical tools, and significant new data contradicting DOE’s prior conclusions, DOE cannot blindly rely on its prior determinations to approve LCE’s application. DOE must examine whether the request complies with the public interest based on current circumstances and the facts in *this* record. It does not.

2. LCE’s Application Is Contrary to the Public Interest.

1. 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.”³³ Recent data undermines any conclusion that LNG exports have little impact on domestic natural gas prices or that Henry Hub gas prices are forecasted to remain low. To the contrary, domestic energy market responses to an explosion at the Freeport LNG facility and gas prices throughout recent winters demonstrate that the Lake Charles LNG Project will harm US consumers. DOE’s prior studies³⁴ and LCE’s application fail to address these developments, which demonstrate that an extension is not in the public interest.

³² *Motor Vehicle Mfrs. Ass’n of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

³³ See, e.g., DOE/FE Order No. 3357-B (Freeport LNG Expansion) at 10 (Nov. 14, 2014), <https://www.energy.gov/sites/prod/files/2014/11/f19/ord%203357-B.pdf>; 85 Fed. Reg. 52,243 (Aug. 25, 2020) (“In evaluating the public interest, DOE takes seriously the potential economic impacts of higher natural gas prices.”).

³⁴ The most recent economic study that DOE indicated it intends to rely on here is from 2018, well before these recent developments. See Notice of Application, 88 Fed. Reg. 60,670, 60,671 (Sept. 5, 2023) (referencing NERA Economic Consulting, Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports (June 7, 2018), available at www.energy.gov/sites/prod/files/2018/06/f52/Macroeconomic%20LNG%20Export%20Study%202018.pdf).

- a) *The Freeport LNG explosion further affirms the Lake Charles LNG Project will increase domestic gas prices, harming consumers.*

A 2022 explosion and fire at the Freeport LNG facility—and the resulting drop in domestic gas prices—provided stark confirmation that increasing LNG export volumes will cause real and significant increases in domestic gas prices.

On June 8, 2022, an explosion and fire at the Freeport LNG facility caused an immediate shut down of operations.³⁵ In November 2022, PHMSA released a heavily redacted consultant’s report that blamed inadequate operating and testing procedures, human error, and fatigue for the explosion.³⁶ Ultimately, the Freeport facility remained shut down for about eight months, and it has yet to fully resume full operations.³⁷

Most relevant here, the Freeport explosion demonstrates a clear and significant connection between U.S. LNG exports and domestic gas prices. 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.³⁸ Immediately after the explosion was reported, domestic gas prices fell by 16 percent,³⁹ highlighting the direct connection between gas exports and domestic prices and supply. Despite this initial drop, domestic gas prices quickly rebounded to exceptionally high levels as a result of LNG exports, as discussed in the next section. Thus, this event, which post-dates DOE’s 2018 study entitled *Macroeconomic Outcomes of Market Determined Levels of*

³⁵ U.S. Energy Information Administration, *Fire Causes Shutdown of Freeport Liquefied Natural Gas Export Terminal (June 23, 2022)*, available at <https://www.eia.gov/todayinenergy/detail.php?id=52859> [hereinafter “EIA, Freeport Fire”] (attached).

³⁶ Reuters, *U.S regulator releases report blaming Freeport LNG blast on inadequate processes*, (Nov. 16, 2022), available at <https://www.reuters.com/business/energy/freeport-lng-provides-no-timeline-texas-export-plant-restart-2022-11-15/> (attached); Mike Soraghan, Mike Lee, Carlos Anchondo, *Fatigue contributed to Texas LNG explosion, probe says*, E&E News, (Nov. 16, 2022), available at <https://www.eenews.net/articles/fatigue-contributed-to-texas-lng-explosion-probe-says/> (attached)

³⁷ Reuters, *Freeport LNG gets approval to restart more of export plant in Texas*, (Oct. 27, 2023), available at <https://www.reuters.com/markets/commodities/freeport-lng-gets-approval-restart-more-export-plant-texas-2023-10-27/>(attached).

³⁸ EIA, *Freeport Fire*, *supra* note 35.

³⁹ Pippa Stevens, *Natural Gas Plummets as Freeport Delays Facility Restart Following Explosion*, CNBC (June 14, 2022), available at <https://www.cnbc.com/2022/06/14/natural-gas-plummets-as-freeport-delays-facility-restart-following-explosion.html> (attached).

U.S. LNG Exports,⁴⁰ undermines DOE’s prior conclusions on this issue. DOE must address the Freeport LNG explosion, and the demonstrated connection between LNG exports and domestic prices, in its public interest analysis.

b) *Winter 2021-2022 and 2022-2023 gas prices demonstrate that LNG exports are harming US 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.⁴¹ The same dynamic played out in the winter of 2022-2023.⁴² The Wall Street Journal,⁴³ S&P Global Platts Analytics,⁴⁴ the Institute for Energy Economics and Financial Analysis,⁴⁵ Industrial Energy Consumers of America,⁴⁶ and others have agreed that LNG exports are driving up domestic gas prices. Indeed, FERC identified LNG exports as the “primar[y]” source of the additional demand that drove gas price increases in 2021-2022.⁴⁷ And these price increases were severe. For the winter of 2021-2022, benchmark futures prices at the Henry Hub increased 103% relative to the

⁴⁰ NERA Economic Consulting, *Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports* (June 7, 2018), available at www.energy.gov/sites/prod/files/2018/06/f52/Macroeconomic%20LNG%20Export%20Study%202018.pdf.

⁴¹ 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) [hereinafter “2021-2022 Winter Assessment”]; *accord id.* at 11.

⁴² FERC, Winter Energy Market and Reliability Assessment (Oct. 20, 2022) at 1, 4, 5, available at <https://www.ferc.gov/media/report-2022-2023-winter-assessment> (attached) [hereinafter “2022-2023 Winter Assessment”];

⁴³ Collin Eaton & Katherine Blunt, Natural-Gas Exports Lift Prices for U.S. Utilities Ahead of Winter, WALL ST. J. (Nov. 7, 2021), available at <https://www.wsj.com/articles/natural-gas-exports-lift-prices-for-u-s-utilities-ahead-of-winter-11636281000> (attached).

⁴⁴ 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), available at <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> (attached).

⁴⁵ See also Clark Williams-Derry, Booming U.S. natural gas exports fuel high prices, IEEFA U.S. (Nov. 4, 2021), available at <https://ieefa.org/ieefa-u-s-declining-demand-lower-supply-dont-explain-rapidly-rising-gas-prices/> (attached); Shafiqul Alam et al., *Global LNG Outlook 2023-27*, IEEFA (Feb. 15, 2023), available at <https://ieefa.org/resources/global-lng-outlook-2023-27> (attached).

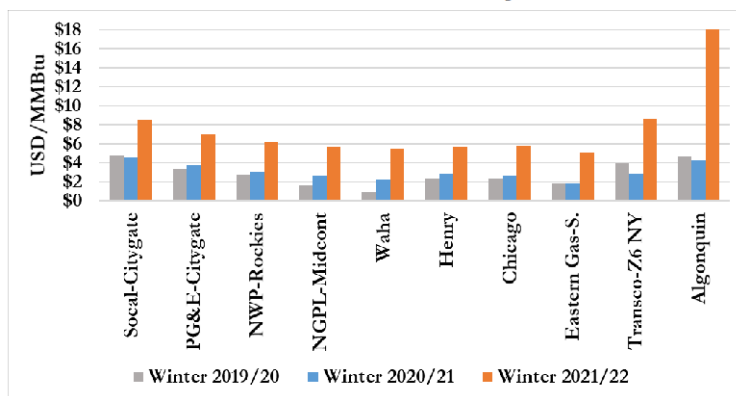
⁴⁶ Letter from Paul N. Cicio to Jennifer Granholm (Nov. 22, 2021), available at https://www.ieca-us.com/wp-content/uploads/11.22.21_LNG_-Why-a-Safety-Valve-is-Needed_FINAL.pdf (attached).

⁴⁷ 2021-2022 Winer Assessment, *supra* note 41, at 2.

prior winter,⁴⁸ with larger increases elsewhere, including more than quadrupling of the price at the Algonquin Citygate outside Boston,⁴⁹ as illustrated in this chart from FERC:⁵⁰

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 latest report from the EIA reiterates that this connection between higher LNG exports and higher domestic gas prices will continue through 2050.⁵¹ And the International Energy Agency's *World Energy Outlook 2023* report finds that, under the current-policy scenario, which includes a 28% increase in global LNG between 2022 and 2030, U.S. natural gas prices are expected to be 67% higher (\$4.00 per MMBtu) when compared to the net-zero scenario, which includes a 6% increase in global LNG between 2022 and 2030, (\$2.40 per MMBtu) by 2030.⁵²

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

⁴⁸ *Id.* at 2, 11.

⁴⁹ *Id.* at 12.

⁵⁰ 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).

⁵¹ U.S. EIA, AEO2023 Issues in Focus: Effects of Liquefied Natural Gas Exports on the U.S. Natural Gas Market (May 2023), available at https://www.eia.gov/outlooks/aeo/IIF_LNG/pdf/LNG_Issue_in_Focus.pdf [hereinafter "AEO2023 Issues in Focus"] (attached) ("We project that through 2050 additional U.S. LNG exports would increase the natural gas spot price at the Henry Hub," which will "ultimately affect natural gas prices for consumers in all U.S. end-use sectors to some degree.")

⁵² IEA, *World Energy Outlook 2023* at 96, 135.

than they spent the prior winter.⁵³ The Industrial Energy Consumers of America, which represents manufacturers that use at least 1 trillion Btu of energy per year,⁵⁴ has repeatedly written to DOE about how export-driven gas prices increases are harming domestic industry.⁵⁵

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.⁵⁶ 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.⁵⁷ 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.”⁵⁸ 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,⁵⁹ 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

⁵³ U.S. EIA, Winter Fuels Outlook (Oct. 2021) at 1, *available at* https://www.eia.gov/outlooks/steo/special/winter/2021_Winter_Fuels.pdf (attached).

⁵⁴ “Membership Info,” IECA, *available at* <https://www.ieca-us.com/membership-info/> (last visited Nov. 6, 2023).

⁵⁵ *See, e.g.*, Letter from Paul N. Cicio to Jennifer Granholm.

⁵⁶ 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/2022-03/Synapse%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).

⁵⁷ *Public*, Merriam-Webster Unabridged Dictionary, <http://www.merriam-webster.com/dictionary/public> (last visited Nov. 6, 2023).

⁵⁸ 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

⁵⁹ *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>.

household.⁶⁰ Increased gas prices will exacerbate the existing energy burden disparities, placing these households at even further risk.⁶¹ 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.

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 reaffirm previous findings—without carefully examining the continuing validity of those analyses. Even the latest EIA analysis⁶² fails to account for the fact that winter 2021-2022 did not result in increased production offsetting, as DOE has anticipated, and there were massive price spikes as a result. At a minimum, DOE should not approve further export applications or extensions until it addresses this issue.

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,⁶³ DOE has stated its reluctance to exercise such authority.⁶⁴ 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 companies,” with the “subsidiary purposes” of addressing

⁶⁰ 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); see also Eric Scheier & Noah Kittner, *A measurement strategy to address disparities across household energy burdens*, 13:288 *Nature Communications* at 6 (2022), available at <https://rdcu.be/dpQIK> [hereinafter “Energy Burden Measurement Tools”] (“Households in communities of color experience energy poverty at a rate 60% greater than those in white communities.”).

⁶¹ *Energy Burden Measurement Tools* at 7 (“Changes in the unit price of energy or slight differences in consumption patterns matter more to those with low incomes than those with higher incomes.”).

⁶² AEO2023 Issues in Focus, *supra* note 51.

⁶³ 15 U.S.C. § 717o

⁶⁴ 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.

“conservation, environmental, and antitrust issues.”⁶⁵ 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, LCE’s application is inconsistent with the public interest and should be denied.

c) Tax subsidies

In addition to domestic price impacts, extensive tax subsidies to LNG companies, including LCE, undermine any argument that tax revenue from LNG terminal operations provides economic benefits.⁶⁶ There appear to be 16 different tax exemptions related to Lake Charles LNG, including at least three specific to the proposed new liquefaction infrastructure.⁶⁷ A recent analysis by Together LA, based on publicly available information about tax abatements in Louisiana,⁶⁸ concludes that in total, the Lake Charles LNG Project’s tax abatements will result in nearly *\$2 billion* (over \$1.97 million) in lost revenues from 2004 through 2032.⁶⁹ These totals—which are solely related to the Lake Charles LNG Project, not any of Energy Transfer’s other holdings—swallow the measly \$16 million in total Ad Valorem property taxes that LCE boasts about Energy Transfer paying between 2020 and 2023.⁷⁰ Even scaled up to the 28-year span, Energy Transfer (across all of its subsidiaries) would pay \$112 million, or 8 times less than LCE alone will get in tax abatements. FERC’s 2015 FEIS does not appear to have considered the impact of these tax abatements when it identified benefits from collected tax revenue.⁷¹

⁶⁵ *Minisink Residents for Env’tl. Pres. & Safety v. FERC*, 762 F.3d 97, 101 (D.C. Cir. 2014) (cleaned up).

⁶⁶ *Contra* Application at 28-29.

⁶⁷ Together Louisiana, ITEP Analysis for Lake Charles LNG (Oct. 24, 2023) (attached) (three highlighted, bottom rows correlate to the three new liquefaction trains needed for the export project).

⁶⁸ Louisiana Economic Development, Industrial Tax Exemption Projects Report, *available at* <https://fastlaneng.louisianaeconomicdevelopment.com/public/reports>.

⁶⁹ ITEP Analysis for Lake Charles LNG.

⁷⁰ Application at 28.

⁷¹ FERC, Lake Charles Liquefaction Project Final Environmental Impact Statement, FERC/EIS-0258F, DOE/EIS-0491, FERC Docket Nos. CP14-119-000, CP14-120-000, and CP14-122-000, DOE Docket Nos. 11-59-LNG and 13-04-LNG at 4-97-98, 5-16 (Aug. 2015) [hereinafter “FEIS”] (containing no discussion of potential tax abatements).

LCE is not alone in receiving staggering amounts of tax abatements for its LNG project. For example, Venture Global received over \$187 million in tax abatements in 2023, despite netting over \$10 billion in profits.⁷² A September 2022 report found that Cheniere saved over \$1.2 billion in tax abatements for its Corpus Christi LNG project.⁷³ And Louisiana has agreed not to collect any industrial property tax revenue from the proposed Driftwood LNG project, a tax break worth between \$1.4 and \$2.4 billion.⁷⁴ These tax abatements require analysis because they undermine the purported tax revenue benefits of these projects, potentially stretching local governments and emergency responders too thin to support the increased load on government services.⁷⁵ Moreover, increased LNG exports will exacerbate harm from climate-driven extreme weather, requiring increased levels of government support that may overwhelm the nominal tax revenue available after accounting for subsidies.⁷⁶

Without examining these tax abatements, and how they may undermine LCE's contribution to basic government services or economic benefits, DOE cannot determine that there will be benefits from increased tax revenue.

⁷² Wesley Muller, *More than \$187 million in Louisiana business tax breaks approved*, LOUISIANA ILLUMINATOR (July 15, 2023), available at <https://lailluminator.com/2023/07/15/more-than-187-million-in-louisiana-business-tax-breaks-approved/> (attached).

⁷³ AutoCase Economic Advisory & Coastal Alliance to Protect Our Environment, *Tax Abatement Economic Analysis Study: Corpus Christi, Nueces County, and San Patricio County* at 7, Table 1 (Sept. 2022), available at <https://www.wepaytheyprofit.com> (attached).

⁷⁴ Sharon Kelly, *Louisiana Offers Fossil Fuel Exporter 'Single Largest' Local Tax Giveaway in American History*, DESMOG (Dec. 20, 2018), available at <https://www.desmog.com/2018/12/20/louisiana-calcasieu-driftwood-lng-export-tellurian-tax-break/> (attached).

⁷⁵ See, e.g., Commonwealth LNG Project Implementation Plan Volume 2.1, Appendix V2.1-1, Excerpts from meeting notes between Commonwealth LNG and Cameron Parish Fire District #10 (Sept. 22, 2023) available at https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230922-5047 (attached) (fire department chief “stated that his Department is not staffed to provide coverage for an LNG Terminal beyond the coverage they are already providing, i.e., dealing with a non-industrial fire or emergency on a plot of land” and “he is concerned that providing first-responder support for the Terminal would negatively impact their ability to respond to the needs of the surrounding community and put firefighters at greater risk than normal for a community fire department”).

⁷⁶ See National Oceanic and Atmospheric Administration, National Centers for Environmental Information, *Billion-Dollar Weather and Climate Disasters: Time Series*, available at <https://www.ncei.noaa.gov/access/billions/time-series> (last visited Oct. 30, 2023).

2. Recent Global Strategic Interest Developments Demonstrate the Extension is Not in the Public Interest.

a) *Short Term Global Interests Do Not Justify Authorizing New Exports Commencing in 2028 or later.*

In its application, LCE alludes to Russia’s unprovoked invasion of Ukraine, stating that “the global events, including the Russian invasion of Ukraine, have only solidified the need for United States LNG around the world.”⁷⁷ Insofar as this global situation is pertinent to the request here, authorizing new exports to come online in 2028—or more realistically sometime in the 2030s⁷⁸—is irrelevant to decreasing Europe’s reliance on Russian gas. There is undoubtedly a public interest in assisting Europe to transition away from Russian gas. But the best way to get Europe off Russian gas is to get Europe off gas altogether, as Secretary Granholm has recognized.⁷⁹ Although Europe may need additional LNG *for a few years*, by the time LCE would be in a position to provide *any* exports from the Lake Charles LNG Project (2028, based on LCE’s optimistic timeline), Europe will have other, better options. And LCE estimates the lifespan of this project to last between 30 and 50 years,⁸⁰ locking in dirty fossil-fuel infrastructure well beyond the Biden administration’s commitment, and global consensus, to achieve net zero emissions by 2050.⁸¹

⁷⁷ Application at 43.

⁷⁸ While LCE asserts that it anticipates commencing exports by 2028, even LCE admits that it may need until 2031. Application at 14. FERC’s EIS for the terminal infrastructure indicates that construction would take at least four years. FEIS at 2-17. To come online by 2028, then, LCE would need to commence construction in 2024. Even if DOE grants the application early next year as LCE requests, there is no indication that LCE would immediately begin construction. LCE has done virtually nothing on this project despite having the requisite approvals for over six years. If DOE grants the application with the standard seven-year deadline, LCE would have until at least 2031—after European demand for US LNG is predicted to abate. Moreover, LCE’s vague proposal to add CCS and possibly a hydrogen/ammonia plant to the facility could significantly delay the construction of this project.

⁷⁹ See, e.g., Ben Lefebvre, DOE Declares an Energy War, POLITICO (Apr. 28, 2022), *available at* <https://www.politico.com/newsletters/morning-energy/2022/04/28/doe-declares-an-energy-war-00028380> [hereinafter DOE declares an Energy War”] (attached) (quoting Sec. Granholm’s statement that “Perhaps renewable energy is the greatest peace plan this world will ever know.”).

⁸⁰ Application at 32.

⁸¹ Executive Order 14,008, “Tackling the Climate Crisis at Home and Abroad,” 86 Fed. Reg. 7619 (Jan. 27, 2021); FACT SHEET: Renewed U.S. Leadership in Glasgow Raises Ambition to Tackle Climate Crisis (Nov. 13, 2021), *available at* <https://www.whitehouse.gov/briefingroom/statements-releases/2021/11/13/fact-sheet-renewed-u-s-leadership-in-glasgow-raisesambition-to-tackle-climate-crisis/> (attached) [hereinafter “Glasgow Fact Sheet”].

The International Energy Agency has concluded that heat pumps, building efficiency, and similar measures can significantly reduce the European Union’s gas use, and thus the impact of Russian energy, with increasing reductions each year.⁸² In 2022, Europe offset nearly 60% of its reliance on Russian gas through means other than alternative gas supplies, including increased renewable energy and energy conservation measures.⁸³ Some analyses conclude that the EU can entirely eliminate reliance on Russian gas by 2025, with efficiency and renewable energy making up for two thirds of the former Russian supply.⁸⁴ Similarly, the United Kingdom’s Energy & Climate Intelligence Unit has concluded that *all* of the UK’s gas demand that was previously met by Russian gas could be eliminated through installation of heat pumps and better installation within five years.⁸⁵ European Energy Commissioner Kadri Simson has emphasized that Europe remains committed to renewable energy goals, and is looking to additional gas imports only for the short term.⁸⁶ Members of the U.S. Congress and the European Parliament have emphasized that, notwithstanding the need to assist Europe in transitioning off of Russian gas, no new gas infrastructure or exports should be approved.⁸⁷

We recognize that the U.S and European Commission have nonetheless proposed for EU member states to “work ... toward the goal of ensuring, until at least 2030, demand for approximately 50 bcm/year,” equivalent to approximately 4.8 bcf/d, “of additional U.S. LNG that is consistent with our shared net-zero goals.”⁸⁸ This goal is ill-advised and self-refuting, as

⁸² International Energy Agency, A 10-Point Plan to Reduce the European Union’s Reliance on Russian Natural Gas (March 3, 2022), *available at* <https://www.iea.org/reports/a-10-point-plan-to-reduce-the-european-unions-reliance-on-russian-natural-gas> (attached).

⁸³ International Energy Agency, World Energy Outlook 2023 at 87.

⁸⁴ Briefing: EU Can Stop Russian Gas Imports by 2025, *available at* https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/Briefing_EU-can-stop-Russian-gas-imports-by-2025.pdf (attached).

⁸⁵ Harry Cockburn, Heat Pumps and Insulation ‘Fastest Way to End Reliance on Russian Gas,’ THE INDEPENDENT (March 9, 2022), *available at* <https://www.independent.co.uk/climate-change/news/heat-pumps-russian-gas-north-sea-b2032017.html> (attached); *see also* Energy & Climate Intelligence Unit, Ukraine Conflict and Impacts on UK Energy, *available at* <https://eciu.net/analysis/briefings/uk-energy-policies-and-prices/briefing-ukraine-conflict-and-impacts-on-uk-energy> (last updated Mar. 8, 2022 and attached).

⁸⁶ *See, e.g.*, DOE Declares an Energy War, *supra* note 79.

⁸⁷ Jared Huffman et al., Letter to U.S. President Biden and E.C. President Von der Leyen (May 19, 2022), *available at* https://huffman.house.gov/imo/media/doc/Letter%20Regarding%20the%20EU-US%20Joint%20Energy%20Security%20Statement_5.19.22.pdf (attached).

⁸⁸ Fact Sheet: United States and European Union Commission Announce Task Force to Reduce Europe’s Dependence on Russian Fossil Fuels, March 25, 2022, *available at* <https://www.whitehouse.gov/briefing->

increased production and use of LNG through 2030 cannot be made consistent with the shared net-zero goals. But even if this goal is pursued, it does not support DOE’s authorization of the additional LNG exports here. Some of this additional demand can be satisfied by existing, already-operating facilities. Some existing facilities sell gas on spot markets, and even facilities with long-term contracts with Asian buyers may be interested in redirecting cargoes.⁸⁹ Moreover, previously-approved non-FTA exports from *facilities under construction* will already provide an additional 7.54 bcf/d of U.S. export supply.⁹⁰ And even if this additional demand required additional LNG exports in the near term, this goal only calls for European demand for LNG through 2030, *i.e.*, optimistically two years into LCE’s requested 20+ year authorization and planned 30-50 years of operation.

Europe may need some additional LNG this year. But the exports authorized here will not be available until 2028, at the earliest. On that timescale, the best way to support our allies, and the U.S.’s own interests, is to help Europe transition off of gas, rather than to offer additional supply. But even if DOE were to conclude that Europe needed additional supply through 2030, that would at most justify previously-authorized exports, from facilities that are already under construction—not the exports from 2028 through 2050 that LCE requests authorization for here.

Finally, if DOE contends that the exports at issue here are in the public interest because Europe will need the gas, then DOE should ensure that the gas goes to Europe. DOE has broad authority to grant the requested additional authorization “in whole or in part, with such modification and upon such terms and conditions as [DOE] find[s] necessary or appropriate.” 15 U.S.C. § 717b(a). If providing additional gas to Europe is the justification for these exports, DOE should explore whether to impose conditions that ensure that the authorization is actually used for that purpose. If DOE fails to impose such conditions, DOE must take a hard look at

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).

⁸⁹ See, e.g., Reuters, Europe draws more LNG from Asia as China imports slump (Apr. 28, 2022), available at [https://www.reuters.com/markets/commodities/europe-draws-more-lng-asia-china-imports-slump-2022-04-28/#:~:text=LAUNCESTON%2C%20Australia%2C%20April%2028%20\(of%20pipeline%20supplies%20from%20Russia](https://www.reuters.com/markets/commodities/europe-draws-more-lng-asia-china-imports-slump-2022-04-28/#:~:text=LAUNCESTON%2C%20Australia%2C%20April%2028%20(of%20pipeline%20supplies%20from%20Russia) (attached); Bloomberg, China Looks to Sell Spare LNG as Virus Lockdowns Hit Demand (Apr. 24, 2022), available at <https://www.bloomberg.com/news/articles/2022-04-25/china-looking-to-sell-spare-lng-as-virus-lockdowns-hit-demand> (attached).

⁹⁰ See U.S. Energy Info. Admin., U.S. Liquefaction Capacity (June 29, 2023), available at <https://www.eia.gov/naturalgas/U.S.liquefactioncapacity.xlsx> (attached as PDF).

whether the exports are likely to actually assist Europe, and if not, whether this undermines any conclusion that the exports are consistent with the public interest.

b) *Fundamental shifts in the global market, highlighted by LCE's repeated delays, demonstrate that the application is not in the public interest.*

The need for U.S. LNG exports to meet global market demands no longer exists at the rate anticipated when the Lake Charles LNG Project was first proposed in 2013, making the completion of this project no longer commercially viable or in the public interest. The company has explicitly acknowledged this change in the global market conditions in its repeated requests for additional time to begin construction and operations of the Lake Charles LNG Project.⁹¹ While LCE touts its recent “head of agreements” as demonstrating demand,⁹² those agreements are non-binding and therefore provide no assurance of actual demand for LCE’s LNG. LCE has thus been unable to secure a final investment decision over six years after receiving its now-stale authorizations.⁹³ This lack of demand demonstrates that the project is not in the public interest. Approving this project despite the apparent lack of demand will unnecessarily cloud the picture as DOE is examining other LNG export proposals.⁹⁴ And as DOE has acknowledged, many of these LNG projects will fail;⁹⁵ there is no reason for DOE to approve a project that has already faced such obvious challenges.

Rather than reverting to the pre-COVID *status quo*, global energy markets are now working to transition away from fossil fuels, including LNG, as quickly possible.⁹⁶ As discussed

⁹¹ Lake Charles Exports, LLC, DOE/FE Order Nos. 2987-A, 3324-B-A, 4011-A (Oct. 6, 2020) (extending the commencement date for each non-FTA export authorization to December 16, 2025); DOE/FE Order 2987-A, 3324-A, & 4011-A (same); LNG Export Extension Application at 1-2, 4; LCE Extension Application.

⁹² Application at 18.

⁹³ Application at 19.

⁹⁴ 88 Fed. Reg. at 25,276 (“Over time, 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,” has widened, with detrimental effects.”).

⁹⁵ See, e.g., Order 4011 at 41 (“[W]e note that it is far from certain that all or even most of the proposed LNG export projects will ever be realized because of the time, difficulty, and expense of commercializing, financing, and constructing LNG export terminals, as well as the uncertainties inherent in the global market demand for LNG.”);

⁹⁶ Reuters, U.S. LNG projects face more reluctant buy side amid new concerns (Oct. 22, 2023), *available at* <https://www.reutersevents.com/downstream/engineering-and-construction/us-lng-projects-face-more-reluctant-buy-side-amid-new->

in Section II.B.3.c.vi, the IPCC's 6th Assessment Report provides overwhelming evidence that climate hazards are more urgent and severe than previously understood and that aggressive reductions in emissions within the next decade are essential to avoiding the most devastating climate change harms. President Biden has acknowledged that we are facing a "profound climate crisis" and have very little time to act to avoid the most catastrophic impacts of climate change.⁹⁷ As such, tackling the climate crisis must be a priority for the actions and decisions of all federal agencies. President Biden also reinstated the United States' commitment to the Paris Agreement⁹⁸ and made additional commitments in Glasgow.⁹⁹

Meeting those commitments, and more, is critical: a 2021 report by the International Energy Agency concluded that "hav[ing] a fighting chance of . . . limiting the rise in global temperatures to 1.5°C. . . requires nothing short of a total transformation of the energy systems that underpin our economies."¹⁰⁰ In order for the global energy sector to reach net zero emissions by 2050, many of the LNG facilities currently under construction or at the planning stage cannot be built.¹⁰¹ The report also projects that from 2020 to 2050, natural gas traded as LNG will fall by 60 percent, and global demand will decrease by more than five percent on average in the 2030s alone.¹⁰² Thus, European buyers recognize that LNG, long touted as a climate solution, is in fact a climate problem.¹⁰³

This shift in the market away from LNG is not limited to European buyers: Asian demand is forecasted to decline significantly in coming years as well. A 2023 report from the Institute for Energy Economics and Financial Analysis anticipates that weak supply growth and robust demand will keep global LNG prices high for several years, which will put sustained downward pressure

concerns?utm_campaign=PTC%2025OCT23%20Newsletter&utm_medium=email&utm_source=Eloqua (attached).

⁹⁷ Exec. Order 14008, Tackling the Climate Crisis at Home and Abroad (Jan. 27, 2021), 86 Fed. Reg. 7619 (Feb. 1, 2021).

⁹⁸ Anthony Blinken, The United States Officially Rejoins the Paris Agreement, U.S. Department of State, *available at* <https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/> (Feb. 19, 2021).

⁹⁹ Glasgow Fact Sheet, *supra* note 81..

¹⁰⁰ IEA, Net Zero by 2050, *supra* note 14.

¹⁰¹ *Id.* at 102–03.

¹⁰² *Id.*

¹⁰³ Lydia Plante and Ted Nace, Nervous Money, Global Energy Monitor (June 2021) at 4, *available at* <https://globalenergymonitor.org/report/nervous-money/> (attached).

on Asian demand growth, particularly among price-sensitive emerging markets that were widely expected to be the primary drivers of global LNG demand.¹⁰⁴ In 2022, demand from emerging buyers in Asia fell 15%.¹⁰⁵ Japan, a historically big player in the LNG import market and one of the buyers LCE's application highlights,¹⁰⁶ plans to cut GHG emissions by 46% by 2030 by boosting renewable energy to double 2019 levels and cutting the share of LNG in the national electricity mix by 1% by 2030.¹⁰⁷ Similarly, South Korea plans to cut LNG back to just 9.3% of the country's power mix by 2036, down from almost 30% in 2021."¹⁰⁸ Even China, anticipated to be the largest LNG growth market for 20 years, is not projected to need any new LNG contracts, at least through 2035.¹⁰⁹ High LNG prices have also deterred India, Pakistan, and Bangladesh from LNG purchases, with an overall 16% reduction in LNG imports in 2022.¹¹⁰ IEEFA has downgraded prospects for medium-term LNG demand growth in that region, previously thought to be an emerging LNG market.¹¹¹ And Southeast Asia faces a similar decline in LNG demand forecasts and uptick in renewable energy development.¹¹² This combination of lack of demand combined with the numerous other LNG export facilities planned to come online in 2025-2026 (*i.e.*, several years before LCE's proposed 2028 operations), led IEEFA to forecast an impending LNG supply glut, meaning lower-than-anticipated prices and profits for LNG exporters.¹¹³

The International Energy Agency's 2023 World Energy Outlook similarly downgraded its forecasts for gas demand in 2040 compared with its 2021 forecasts, due a faster move away

¹⁰⁴ IEEFA, *Global LNG Outlook 2023-2027* at 5 (Feb. 2023), *available at* <https://ieefa.org/resources/global-lng-outlook-2023-27>

¹⁰⁵ *Id.*

¹⁰⁶ Application at 43.

¹⁰⁷ IEEFA 2023-2027 Outlook at 20; Reuters, *Japanese utilities want G7 to allow countries to set their own paths to energy transition* (Mar. 19, 2023), *available at* <https://www.reuters.com/business/energy/japanese-utilities-want-g7-allow-countries-set-their-own-paths-energy-transition-2023-03-17/> (attached).

¹⁰⁸ IEEFA 2023-2027 Outlook at 20; Charles Lee, S&P Global Insights, *South Korea to cut LNG in power mix to 9.3% in 2036, sharply raises role of nuclear energy* (Jan. 12, 2023), *available at* <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/lng/011223-south-korea-to-cut-lng-in-power-mix-to-93-in-2036-sharply-raises-role-of-nuclear-energy> (attached).

¹⁰⁹ IEEFA 2023-2027 Outlook at 26, 30.

¹¹⁰ *Id.* at 31.

¹¹¹ *Id.* at 31.

¹¹² *Id.* at 38, 40-41.

¹¹³ *Id.* at 5.

from gas in advanced economies, an upward revision to the outlook for renewables, and slower projected growth in emerging market and developing economies.¹¹⁴ The IEA also lowered its 2050 LNG demand projections by nearly 15% and overall natural gas demand by 20% in the latest report versus its outlook in 2021.¹¹⁵ The report forecasts that, “[s]ince natural gas demand peaks in all [forecasted] scenarios by 2030, there is little headroom remaining for either pipeline or LNG trade to grow beyond then.”¹¹⁶ Based on the LNG capacity already *in operation or under construction*, the IEA concludes that “global LNG markets look amply supplied in the [business as usual scenario] until at least 2040.”¹¹⁷ Under a scenario wherein all countries meet their aspirational GHG reduction targets, “LNG demand peaks by 2030 and projects under construction today are sufficient to meet demand.”¹¹⁸ And in the scenario where countries achieve net zero energy by 2050, “a global supply glut forms in the mid-2020s and under construction projects are no longer necessary.”¹¹⁹ Because Lake Charles LNG is far from starting construction, it fails to qualify under any of these scenarios.¹²⁰ Thus, LCE’s proposal to add incremental LNG exports in the late 2020s is neither needed nor wise.

Given the significant changed economic, political, and scientific circumstances that have developed since DOE first issued an export authorization for the Lake Charles LNG Project in 2016, DOE’s prior public interest finding is irrelevant. These new circumstances demonstrate that LCE’s application is not in the public interest. This new information also constitutes “significant new circumstances or information relevant to environmental concerns and bearing

¹¹⁴ World Energy Outlook 2023 at 77.

¹¹⁵ *Id.* at 78.

¹¹⁶ *Id.* at 139; Reuters, *IEA says “unprecedented” supply surge could lead to LNG glut from 2025* (Oct. 24, 2023), available at <https://www.reuters.com/markets/commodities/iea-says-unprecedented-supply-surge-could-lead-lng-glut-2025-2023-10-24/>.

¹¹⁷ World Energy Outlook 2023 at 139.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ IEA warns that even projects *already under construction* are at significant risk of not recovering their initial capital investments: “While the sponsors of all LNG projects currently under construction can expect to fully recover their initial capital investment in the [business as usual scenario], around two-thirds of these projects are at risk of not doing so in the [achieving aspirational targets scenario], and up to 75% could fail to do so in the [net zero by 2050 scenario].” World Energy Outlook 2023 at 140.

on the proposed action or its impacts”¹²¹ and therefore triggers DOE’s obligation to conduct supplemental NEPA review.

3. The Lake Charles LNG Project’s Environmental Impacts Require New NEPA Analysis and Demonstrate an Extension is Not in the Public Interest.

In addition to the immediate harms caused by price increases and inconsistency with global strategic interests, LNG exports will cause environmental harm lasting for generations. Those harms include impacts occurring across the entire LNG lifecycle that both the Natural Gas Act and NEPA require DOE to consider.

As noted in the public notice, DOE must “give appropriate consideration to the environmental effects” of the Lake Charles LNG Project, and “[n]o final decision will be issued” on LCE’s application “until DOE has met its environmental responsibilities.”¹²² To do so, DOE must conduct an Environmental Impact Statement (“EIS”) that considers the project’s direct, indirect, and cumulative impacts based on current science and project-specific information. As part of that analysis, DOE must revisit the deeply flawed analysis of the climate impacts of LNG exports from its general studies and address the latest changes to LCE’s proposed project, including LCE’s proposals to use carbon capture and storage (“CCS”) and produce ammonia. In the alternative, if DOE wants to rely on FERC’s 2015 EIS, DOE must conduct a supplemental EIS to address significant new information and changes to the project since LCE’s 2013 application. Regardless of whether DOE evaluates the project’s environmental impacts through a new or Supplemental EIS, the Lake Charles LNG Project will cause extensive environmental harms that render it contrary to the public interest.

- a) DOE Must Conduct an EIS or Supplemental EIS that Incorporates All of Its Environmental Analysis.*

NEPA applies to all major federal actions with the potential to significantly affect the environment. The decision to authorize LNG exports is such an action. *See Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321 (D.C. Cir. 2021). As a practical matter, if the new application for exports is denied, the adverse impacts caused by the Lake Charles LNG Project will not occur. LCE acknowledges that it cannot reach a final investment

¹²¹ 40 C.F.R. § 1502.9(c)(1).

¹²² 88 Fed. Reg. 60,671 (Sept. 5, 2023).

decision—or proceed with the project—without the requested new authorization.¹²³ Thus, NEPA requires DOE to examine the environmental impacts of authorizing those exports.

Because this DOE is evaluating the project in the first instance, NEPA requires DOE to put its best foot forward by conducting a new NEPA analysis considering all current circumstances, information, and analytical tools. Although agencies can sometimes meet their NEPA obligations, in whole or in part, by tiering off a valid prior analysis,¹²⁴ there is no such valid prior analysis here. As discussed below, FERC’s 2015 EIS is both outdated and lacks critical information necessary for DOE to evaluate the present application. Subsequent events, including LCE’s own proposals for changes to the project, would require supplemental analysis before any federal action could occur here. DOE simply cannot adopt FERC’s 2015 EIS without further analysis. If DOE decides to tier off of FERC’s 2015 EIS, it must first remedy the deficiencies in that document.¹²⁵ And even then, tiering to the 2015 EIS would not give DOE a free pass; DOE must still examine the new application in light of current circumstances and the latest tools and analytical approaches available.

Even if DOE could rely on this old EIS, DOE would still be required to determine whether new information required that EIS to be supplemented before DOE could rely on it here. 40 C.F.R. § 1502.9(d) (2022). Supplementation is required whenever there is *any* new information or circumstances bearing on the project’s impacts, or when there have been *any* pertinent changes to the project, provided that some “major Federal action remains to occur;”¹²⁶ the question is not simply whether the proposed federal action *itself* constitutes such a change or new circumstance.¹²⁷ Here, there are a plethora of such changes, discussed in Section II.B.3.c:

- The proposals to modify the facility to incorporate carbon capture and sequestration and ammonia production

¹²³ Application at 4-5.

¹²⁴ 40 C.F.R. § 1501.11.

¹²⁵ See *N. Alaska Env't Ctr. v. U.S. Dep't of the Interior*, 983 F.3d 1077, 1091 (9th Cir. 2020) (“*Pit River Tribe* illustrates that the adequacy of analysis in previous NEPA documents for the present action may influence whether we construe those NEPA documents as covering the present action. Relatedly, *Pit River Tribe* shows that adequacy may remain relevant even after the statute of limitations has run.”).

¹²⁶ 40 C.F.R. § § 1502.9(d).

¹²⁷ 40 C.F.R. § 1502.9(c)(1) (requiring supplementation when there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts”).

- The delay in implementing and proposed extended lifespan of the project meaning that infrastructure built in the 1980s could be used for nearly 100 years
- The substantial additional industrial development in the area, including at least three new LNG terminals in the vicinity of the proposed project
- Significant new information about sea level rise and climate-driven extreme weather that substantially increase risks to the terminal facility and LNG tanker traffic
- Listing of the Rice’s whale as endangered and proposed critical habitat designation
- Federal policy changes that implicate analysis of greenhouse gas impacts, including readoption of the social cost of carbon protocol and adoption of new federal emission reduction targets.

In discussing the obligation to supplement environmental impact statements, the D.C. Circuit has explained that “When new information comes to light the agency must consider it, evaluate it, and make a reasoned determination whether it is of such significance as to require implementation of formal NEPA filing procedures.”¹²⁸ Even when relying on a prior NEPA analysis, FERC retains an “obligation . . . to analyze new circumstances and new information under the supplementation rubric.”¹²⁹ DOE’s determination that some, but not all, of these new circumstances did not mandate a supplemental EIS for a narrow extension of the export term (for LCE’s existing authorizations that will expire in 2025), does not satisfy DOE’s duty to make that evaluation here, where DOE is evaluating whether to approve the project in the first instance. That determination was explicitly limited to the narrow scope of the application at issue, without any new construction or project modifications, in separate dockets and on authorizations that are irrelevant here.¹³⁰ Here, DOE cannot simply adopt the 2015 EIS without

¹²⁸ *People Against Nuclear Energy v. U.S. Nuclear Regulatory Comm’n*, 678 F.2d 222, 234 (D.C. Cir. 1982), *rev’d on other grounds sub nom. Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766 (1983) (quotation omitted).

¹²⁹ *N. Alaska Env’t Ctr. v. U.S. Dep’t of the Interior*, 983 F.3d 1077, 1096 (9th Cir. 2020).

¹³⁰ *See* DOE, Supplement Analysis for the Application of Lake Charles LNG Export Company, LLC and Lake Charles Exports, LLC to Extend Their Authorized Export Term Through December 31, 2050 at 4 (Nov. 2023) (“This Supplement Analysis examines whether the proposed modification—an addition of two years and 15 days to the period of authorized exports—would represent a substantial change to the proposed action or significant new circumstances or information requiring a supplement to the existing EIS.”)

supplementation. DOE must prepare, circulate, and file a Supplemental EIS that addresses these new developments and make it available for public comment.¹³¹

Similarly, if DOE intends to rely on its general studies to satisfy its NEPA obligations to analyze the project's greenhouse gas impacts, it cannot do so by belatedly referencing them in its order approving LCE's application.¹³² Instead, DOE must properly incorporate those non-NEPA general studies into its EIS or Supplemental EIS, address project-specific information that is available to supplement its general review, conduct the project-specific analysis required by NEPA including alternatives and mitigation, and make that EIS or Supplemental EIS available for public comment. Because NEPA is a procedural statute, agencies are not free to ignore NEPA's required procedures or substitute their own. And one of NEPA's procedural requirements is that the analysis of environmental impacts actually be discussed in the EIS or a Supplemental EIS. DOE can incorporate other materials, but it must do so explicitly, and these materials must be summarized in the EIS or Supplemental EIS.¹³³ Put differently, a defective NEPA document cannot be cured by pointing to other material not properly incorporated therein.¹³⁴

Moreover, the non-NEPA documents referenced in DOE's notice of application do not contain all of the information NEPA requires regarding the greenhouse gas impacts of the Lake Charles LNG Project. This information includes a discussion of opportunities for mitigation and a rigorous exploration of alternatives that might reduce environmental impacts. Nor are the analyses DOE references project specific. For example, although DOE previously concluded that it was difficult to predict where gas would come from or where it would go for exports in general, here, DOE has the benefit of LCE's statements that it conducts extensive upstream activities itself and that it anticipates obtaining supply gas from "Texas and Louisiana producing

¹³¹ 40 C.F.R. § 1502.9(c)(4).

¹³² See, e.g., Order No. 3909-C at 6 (Apr. 27, 2022), <https://www.energy.gov/sites/default/files/2022-04/ord3909c.pdf>; Order No. 3978-E at 6 (Apr. 27, 2022), <https://www.energy.gov/sites/default/files/2022-04/ord3978e.pdf>.

¹³³ See 40 C.F.R. § 1502.21 (2019) (material incorporated by reference "shall be cited in the statement and its content briefly described").

¹³⁴ *Dubois v. U.S. Dep't of Agric.*, 102 F.3d 1273, 1289 (1st Cir. 1996); *Com. of Ky. ex rel. Beshear v. Alexander*, 655 F.2d 714, 718-19 (6th Cir. 1981); *I-291 Why? Ass'n v. Burns*, 517 F.2d 1077, 1081 (2d Cir. 1975).

regions and the offshore Gulf producing regions.”¹³⁵ Similarly, DOE has the benefit of at least six contracts for proposed gas delivery,¹³⁶ and LCE’s statements about the specific needs for the gas deliveries: namely, operation of gas plants in Japan and South Korea.¹³⁷ DOE must address whether available project-specific information enables a more detailed or particularized analysis than DOE has conducted in its general studies.

b) *DOE Cannot Categorically Exclude the Application from NEPA Review.*

When issuing the increases to authorized export volumes from the Lake Charles LNG Project, DOE applied a categorical exclusion for LNG exports not involving new construction, first adopted in 2011 and codified at 10 C.F.R. Part 1021 Part D Appendix B, B5.7.¹³⁸ Because the capacity increases at issue did not involve construction beyond that already approved by FERC, DOE concluded the categorical exclusion applied. The 2011 version of B5.7 involved authorizations to import or export LNG that involve minor operational changes, but not new construction.¹³⁹ In December 2020, DOE modified that categorical exclusion to cover LNG export approvals and any associated transportation by marine vessel, without reference to construction of infrastructure.¹⁴⁰

Because the current application relates to LNG exports from the Lake Charles LNG Project in the first instance, it requires the construction of extensive additional infrastructure, including three liquefaction trains. Even the old version of the categorical exclusion does not apply. Regardless, DOE cannot invoke a version that no longer exists. Nor can DOE invoke the 2020 categorical exclusion because its adoption was arbitrary and unlawful. Alternatively, this proposal lacks the integral elements of an exempt project, precluding reliance on a categorical exclusion here.

¹³⁵ Application at 38.

¹³⁶ Office of Fossil Energy and Carbon Management, Lake Charles Facility Long-Term Contract Information and Registrations at U.S. LNG Export Facilities, *available at* <https://www.energy.gov/fecm/articles/lake-charles-facility> (last visited Oct. 30, 2023).

¹³⁷ Application at 4.

¹³⁸ DOE/FE Order No. 4011 at 30-31 (LCE non-FTA increase); DOE/FE Order No. 4010 at 30-31 (Lake Charles LNG Export non-FTA increase).

¹³⁹ 10 C.F.R. Part 1021 Part D Appendix B, B5.7 (2018).

¹⁴⁰ 10 C.F.R. Part 1021 Part D Appendix B, B5.7 (2021).

i. 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, citing *Sierra Club v. FERC*, 827 F.3d 36 (D.C. Cir. 2016) (“*Freeport I*”).¹⁴¹ 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.¹⁴² 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.”¹⁴³ 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.¹⁴⁴ 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

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

¹⁴² 827 F.3d at 40-41, 46.

¹⁴³ *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.

¹⁴⁴ U.S. DOE, Final Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States (Aug. 2014) at 27-28, *supra* note 17.

result from LNG exports” whatsoever.¹⁴⁵ Insofar as DOE contends that these impacts can be difficult to foresee, that affirms, rather than refutes, the need for case-by-case analysis.¹⁴⁶ Even if DOE determines that upstream 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.¹⁴⁷ 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.¹⁴⁸ This is legally and factually incorrect. LNG exports are rapidly expanding, and this expansion depends upon and is caused by authorizations like the additional exports LCE has requested here. 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

¹⁴⁵ 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).

¹⁴⁶ *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).

¹⁴⁷ 85 Fed. Reg. at 78,202.

¹⁴⁸ The proposed rule ignored wildlife impacts entirely.

impacted by LCE'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.

ii. The Proposed Exports Do Not Satisfy the “Integral Elements” Necessary for a Categorical Exclusion.

Even if the 2020 categorical exclusion was valid, DOE would be unable to rely on it 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. Here, 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.”¹⁴⁹ 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, increased exports threaten a violation of Executive Order 14,008, Tackling the Climate Crisis at Home and Abroad.¹⁵⁰ As noted, 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.”¹⁵¹ 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.¹⁵² Even if DOE somehow contends that giving a lifeline to gas 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 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.¹⁵³ Potentially

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

¹⁵⁰ 86 Fed. Reg. 7619.

¹⁵¹ *Id.* § 101.

¹⁵² IEA, Net Zero by 2050, *supra* note 14, at 102-03.

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

impacted species include the black rail, giant manta ray,¹⁵⁴ oceanic whitetip shark,¹⁵⁵ and Rice's whale (formerly designated as the Gulf of Mexico population of the Bryde's whale).¹⁵⁶ These species are all at risk from ship strikes and noise from vessel traffic related to the Lake Charles LNG Project, impacts that will be avoided unless DOE approves this application.¹⁵⁷ 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,¹⁵⁸ sea turtles,¹⁵⁹ and giant manta rays.¹⁶⁰ Ship traffic also causes noise, which "can negatively impact ocean animals and ecosystems in complex ways."¹⁶¹ 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."¹⁶² Unsurprisingly, many animals display a suite of stress-related responses to increased noise. Because the proposed extension will cause these impacts that would otherwise not occur, the proposal does not satisfy integral element 4.

In sum, DOE cannot categorically exclude this application from NEPA review. Rather, DOE must conduct a new or Supplemental EIS to evaluate the impacts of LCE's proposed LNG exports.

¹⁵⁴ 83 Fed. Reg. 2916 (Jan. 22, 2018).

¹⁵⁵ 83 Fed. Reg. 4153 (Jan. 30, 2018).

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

¹⁵⁷ 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.

¹⁵⁸ 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).

¹⁵⁹ National Oceanic and Atmospheric Administration Fisheries, Understanding Vessel Strikes (June 25, 2017), *available at* <https://www.fisheries.noaa.gov/insight/understanding-vessel-strikes> (attached).

¹⁶⁰ National Oceanic and Atmospheric Administration Fisheries, Giant Manta Ray, *available at* <https://www.fisheries.noaa.gov/species/giant-manta-ray> (attached).

¹⁶¹ National Oceanic and Atmospheric Administration, Cetacean & Sound Mapping: Underwater Noise and Marine Life, *available at* <http://cetsound.noaa.gov/index> (attached).

¹⁶² *Id.*

c) *DOE Must Address Significant Changes to the Project and New Information Through a New or Supplemental EIS.*

LCE has proposed several changes to the project that require NEPA review, either through a new or Supplemental EIS. In addition, significant new information regarding the potential climate impacts of the project and cumulative impacts require supplementation.

i. *LCE's Ammonia and Carbon Capture and Storage Proposals Require Significantly More Information and a Supplemental EIS.*

Contrary to LCE's claims that nothing about the project has changed since it was first proposed in 2013,¹⁶³ at least two changes to the project mandate further NEPA review: LCE's plan to incorporate CCS and its plan to produce ammonia onsite.

With regard to the CCS proposal, LCE provides almost no information about its proposal. LCE instead encourages DOE leave the issue solely to FERC to address at some future point.¹⁶⁴ Yet, LCE nevertheless implies that DOE should consider the greenhouse gas reduction benefits of this entirely hypothetical proposal now. Because CCS wasn't included in FERC's EIS, DOE must conduct its own analysis of the environmental impacts—both the potential benefits and risks—of a CCS proposal here. Absent a requirement for LCE to implement CCS paired with a project-specific analysis of risks and benefits, DOE cannot accept LCE's claims that it will reduce emissions or provide any other environmental benefits.

Similarly, any potential ammonia project requires significantly more information and analysis than the FERC 2015 EIS or LCE's application have provided here. Although the project was not mentioned in the application, FERC staff recently requested additional information about the project.¹⁶⁵ Ammonia production can be extremely dangerous.¹⁶⁶ And it is not clear to what extent that ammonia project is dependent upon the LNG exports at issue here. Again,

¹⁶³ Application at 15.

¹⁶⁴ Application at 21.

¹⁶⁵ Lake Charles LNG Exports et al, Response to Informal Data Request issued August 4, 2023 at Responses to Requests 4.16 through 4.19, Docket Nos. CP14-119-000, CP14-120-000 and CP14-122-000 available at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230814-5248&optimized=false (attached).

¹⁶⁶ Peter Schmitz et al., *Determining a realistic ranking of the most dangerous process equipment of the ammonia production process: A practical approach* § 2.1, 70 J. OF LOSS PREVENTION IN THE PROCESS INDUSTRIES (May 2021), available at <https://www.sciencedirect.com/science/article/pii/S0950423021000073> (attached) (summarizing the fire and explosion risks and toxic pollutants involved in ammonia production).

because the 2015 FERC EIS did not evaluate a potential ammonia project, DOE must conduct rigorous analysis of potential risks from that project here.

DOE must similarly scrutinize LCE's other unsupported allegations about its purported environmentally beneficial project design. For example, LCE's claim that using 5% of the natural gas delivered to the project site to fuel the liquefaction facilities is among the lowest consumption rates in the country¹⁶⁷ is contradicted by other facility designs with electric refrigeration turbines powered by an electric grid that will become increasingly clean over time.¹⁶⁸ LCE also asserts that it will have "one of the lowest Scope 1 and Scope 2 emissions of all U.S. LNG projects" but provides *no* support for that assertion.¹⁶⁹ To the contrary, the Lake Charles LNG Project will emit significant amounts of local, regional, and global air pollutants, both directly and indirectly.¹⁷⁰ LCE also touts Energy Transfer's methane leak reduction methods,¹⁷¹ but fails to address Energy Transfer's history of environmental harms and poor performance track record.¹⁷² Finally, the amount of money that Energy Transfer (not LCE) has donated to various causes¹⁷³ is irrelevant here; those donations do not alleviate the real economic and environmental harms to communities that will result from the project.

DOE cannot simply take these statements of LCE's "beliefs" or hypothetical new proposals about its project design at face value—if DOE wants to incorporate these purported

¹⁶⁷ Application at 20.

¹⁶⁸ See, e.g., Cameron LNG, Amended Expansion Project, *available at* <https://cameronlng.com/expansion/> (last visited Nov. 2, 2023) (describing project design modifications to utilize electric drive motors to replace gas turbine drives); Freeport LNG, Our Business, <https://freeportlng.com/our-business/elng> (last visited Nov. 2, 2023).

¹⁶⁹ Application at 20.

¹⁷⁰ FEIS at 4-125 to 4-129, 4-132 to 4-133 (summarizing criterial pollutant air emissions from construction and operation of the terminal and related infrastructure).

¹⁷¹ Application at 21-26.

¹⁷² See, e.g., Susan Phillips, *Pa. charges Energy Transfer with environmental crimes over Mariner East pipeline project*, NPR STATE IMPACT (Oct. 5, 2021), *available at* <https://stateimpact.npr.org/pennsylvania/2021/10/05/pa-charges-energy-transfer-with-environmental-crimes-over-mariner-east-pipeline-project/> (attached); Mike Soraghan, Trail of spills haunts Dakota Access developer, E&E News (May 26, 2020), *available at* <https://www.eenews.net/articles/trail-of-spills-haunts-dakota-access-developer/> (attached); Sharon Kelly, For 15 Years, Energy Transfer Partners Pipelines Leaked an Average of Once Every 11 Days: Report, DeSmog (Apr. 17, 2018), *available at* <https://www.desmog.com/2018/04/17/energy-transfer-partners-pipelines-leaked-once-every-11-days-greenpeace-report/> (attached).

¹⁷³ Application at 26-29.

benefits into any NEPA or public interest analysis, DOE must independently verify and review LCE's true impacts.¹⁷⁴

ii. DOE Must Evaluate the Risks Posed by LCE's Proposal to Use Infrastructure that Is Already Over 40 Years Old.

LCE is proposing to build the Lake Charles LNG Project on the site of an existing LNG import terminal that was originally approved in 1977, with facilities that first became operational in 1982, more than 40 years ago.¹⁷⁵ Even the newer additions to the facility—including its fourth storage tank—went into service in 2006, more than 17 years ago.¹⁷⁶

LCE proposes to utilize this aging, existing infrastructure, including the LNG storage tanks, for the new export project, now commencing exports in the late 2020s and continuing potentially into the 2080s.¹⁷⁷ Yet, nowhere in FERC's 2015 EIS or LCE's application is there any discussion about the potential risks posed by reusing such aging infrastructure.¹⁷⁸ Even if FERC had considered and approved such use in 2015, it only examined a 25-year lifespan project starting in 2019—i.e., potential use of the infrastructure through the mid-2040s.¹⁷⁹ Now, LCE proposes to commence operations nearly 10 years later than previously proposed, in 2028, and projects the project lifespan to be twice as long, or up to 50 years.¹⁸⁰ Thus, to the extent that FERC made any determinations on this issue in its 2015 EIS, those determinations are outdated. DOE must conduct supplemental analysis of this risk given that the Lake Charles LNG import

¹⁷⁴ 40 C.F.R. § 1506.5(b)(2); *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1165 (10th Cir. 2002), as modified on reh'g, 319 F.3d 1207 (10th Cir. 2003) (finding EIS inadequate where agency failed to verify cost estimates provided by developer).

¹⁷⁵ FEIS at 2-1.

¹⁷⁶ *Id.* at 2-1.

¹⁷⁷ *Id.* at 2-7

¹⁷⁸ The FEIS does include a recommended condition regarding a structural evaluation of each LNG storage tank, *id.* at 4-168, but it does not include any discussion about the anticipated lifespan of such tanks, the types of structural problems that might develop with age and/or non-use, and the specific steps LCE must take to ensure these tanks remain safe potentially into the 2080s.

¹⁷⁹ FEIS at 2-17 (anticipating operations would start in 2019); FEIS at 2-19 (indicating FERC considered the risk of sea-level-rise over a 25-year project lifespan).

¹⁸⁰ Application at 14, 32.

terminal has received almost no use in the last 10 years¹⁸¹ and the tanks may now be utilized into the 2080s, when they're nearly 100 years old. As DOE noted in its Policy Statement on Extensions, continuing to extend lifelines to old projects might deter newer entrants utilizing new technology—and newer infrastructure.¹⁸² The potential risks posed by relying on such outdated infrastructure is an important aspect of the problem that DOE must evaluate, and LCE's new project timeline represents significant new information requiring supplemental NEPA review.

iii. DOE Must Re-Evaluate LCE's Air Impacts and Cumulative Impacts Given Significant Changes in Industrial Development in Southwest Louisiana Since 2015.

Since FERC's 2015 EIS, numerous additional LNG terminals and other industrial infrastructure has been proposed, approved, or in some cases, come online. This presents at least four concerns regarding the sufficiency of FERC's 2015 EIS.

First, recent air dispersion modeling indicates that the Lake Charles area is violating the health-based National Ambient Air Quality Standards ("NAAQS") for at least nitrogen dioxide ("NO₂"). 42 U.S.C. § 7409. In fact, the latest modeling predicts violations at least eight times the NAAQS.¹⁸³ And many of the violations are predicted to occur in low-income and predominantly communities of color.¹⁸⁴ If built, the Lake Charles LNG Project will emit at least 750 tons of nitrogen oxides per year during operations.¹⁸⁵ FERC's 2015 EIS essentially excused LCE's contributions to these violations as being too small to matter.¹⁸⁶ But the Clean Air Act provides no such exemption, as Sierra Club has previously explained.¹⁸⁷ And the exemption threshold at issue is not health-based—therefore DOE cannot rely on that threshold to avoid reviewing the public health and environmental harms caused by LCE's incremental NO_x pollution. Regardless, the magnitude of potential NAAQS violations has increased since the 2015 EIS as Louisiana has

¹⁸¹ Lake Charles LNG has not received any LNG by ship since its last shipment in March 2012. *See* Exhibit B, excerpts from Department of Energy Annual LNG reports 2012 – June 2022, *available at* <https://www.energy.gov/fecm/listings/lng-reports> (last visited August 21, 2022).

¹⁸² *See* 88 Fed. Reg. at 25,278.

¹⁸³ Steven Klafka, P.E., BCEE, Commonwealth LNG, Cameron Parish, Louisiana, *Evaluation of Compliance with the 1-hour NAAQS for NO₂*, [hereinafter Klafka Modeling Report] at 6 (May 24, 2022) (attached).

¹⁸⁴ Klafka Modeling Report at 9-10.

¹⁸⁵ FEIS at 4-128, Table 4.11.1-12

¹⁸⁶ *Id.* at 4-130.

¹⁸⁷ *See, e.g.,* Sierra Club Title V Petition to Object to Lake Charles LNG (June 17, 2022) (attached).

approved more projects that are purported small but cumulatively cause massive NAAQS exceedances. DOE must evaluate the cumulative health impacts resulting from the NO₂ NAAQS exceedance through a new or Supplemental EIS.

Second, because the 2015 EIS omitted numerous now-foreseeable sources from its cumulative impacts analysis, DOE must conduct a new or supplemental analysis considering all reasonably foreseeable cumulative sources in the area. FERC's EIS, for example, did not include potential cumulative impacts from Driftwood LNG, Commonwealth LNG, or CP2.¹⁸⁸ Yet, the EISes for each of these projects included consideration of Lake Charles LNG as a cumulative source.¹⁸⁹ And the newly proposed expansion at Sabine Pass may contribute to cumulative impacts in the Lake Charles area as well.¹⁹⁰ DOE must conduct a new cumulative impacts analysis because each of these projects will involve impacts as large, if not larger, than those from Lake Charles LNG. For example, each project will involve significant emissions of local and regional air pollutants throughout construction and operation, both onsite and from mobile sources like LNG tankers.¹⁹¹ Each of these projects will be located within about 25 miles of Lake Charles LNG, and Driftwood LNG is directly across the Calcasieu from the Lake Charles LNG proposed site. The tanker traffic will also overlap, using similar routes through the Calcasieu River and northern Gulf of Mexico. Construction and operational mobile source traffic in and around Lake Charles LNG will also overlap.

Third, DOE must evaluate the environmental justice implications of LCE's proposal, combined with these cumulative impacts. The 2015 EIS only looked at parish-wide data to determine whether the project would impact environmental justice communities, concluding that

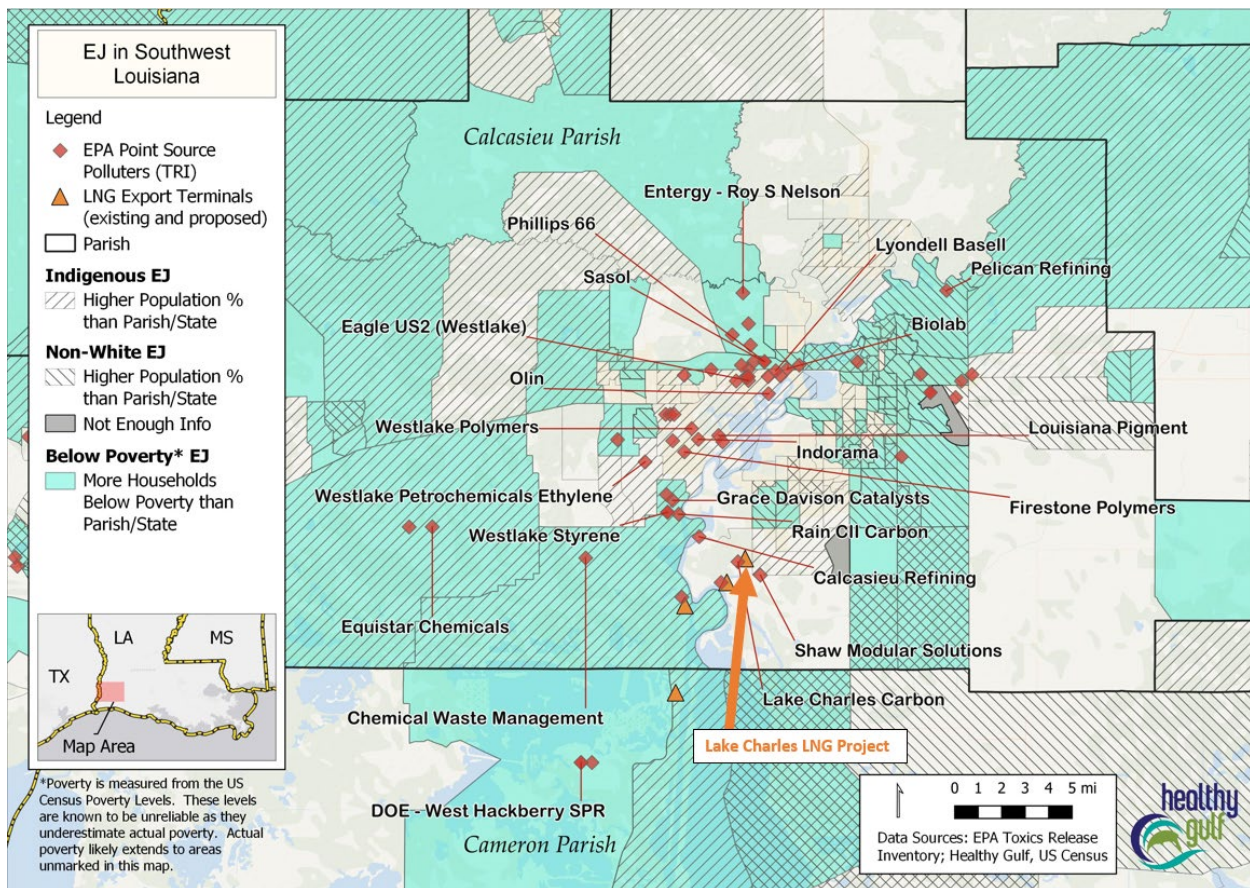
¹⁸⁸ FEIS at 4-205, Table 4.13.1-1 (listing reasonably foreseeable activities and projects considered in the cumulative impacts analysis for the Lake Charles LNG Project).

¹⁸⁹ FERC, CP2 LNG and CP Express Project Final Environmental Impact Statement, Docket No. CP22-21-000, FERC/FEIS-0333 at 4-518 (July 2023), *available at* https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230728-3008; FERC, Final Environmental Impact Statement for the Commonwealth LNG Project, Docket No. CP19-502-000, FERC/FEIS-0316 at 4-359 (Sept. 2022), *available at* https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20220909-3017; FERC, Driftwood LNG Final Environmental Impact Statement, Docket No. CP17-117-000, FERC/FEIS-0284F at 4-273 (Jan. 2019), *available at* https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20190118-3018&optimized=false.

¹⁹⁰ FERC, Notice of Scoping Period Requesting Comments on Environmental Issues for the Planned Sabine Pass Liquefaction Stage 5 Expansion Project, Docket No. PF23-2-000 (Oct. 6, 2023).

¹⁹¹ *See, e.g.*, Commonwealth LNG FEIS at 4-390 (discussing cumulative air quality impacts from various other sources, including LNG terminals).

there were no such impacts. But as shown below, the Lake Charles LNG Project is surrounded by low income communities and communities of color.



Particularly given the increase in LNG terminals proposed within this area and LCE’s contribution to the NAAQS violations discussed above, DOE must examine whether Lake Charles LNG will exacerbate disproportionate harms to these environmental justice communities.

Finally, these new entrants to the LNG export market raise the prospect that there are other, less environmentally damaging alternatives to obtain LNG exports than the now stale Lake Charles LNG Project. In the 2015 EIS, FERC considered systems alternatives including multiple other approved, proposed, or planned LNG projects, but that analysis omitted these newly-proposed LNG terminals.¹⁹² DOE must evaluate whether these other projects are viable

¹⁹² FEIS at 3-6.

alternatives to the Lake Charles LNG Project, and whether these other projects would reduce overall environmental harms associated with LNG exports.¹⁹³

In sum, DOE must require Lake Charles to conduct a new cumulative air impacts modeling to understand potential impacts under today's more polluted baseline. More broadly, DOE must conduct a new cumulative impacts analysis that evaluates the impact of these new sources, combined with the proposed Lake Charles LNG Project.

- iv. DOE Must Consider Significant New Information About the Risks Climate Change and Sea Level Rise Pose to Coastal Louisiana Infrastructure like Lake Charles LNG.

Consideration of the effects of sea-level rise (relative sea-level rise) is well within the scope of DOE's environmental impacts analysis. New data and information, since FERC's 2015 EIS, demonstrate that the myriad of problems for coastal infrastructure associated with sea-level rise will only get worse. For example, as outlined by the CPRA since 2016,¹⁹⁴ Louisiana's coastal wetlands are vulnerable to sea-level rise as a result of its low-lying shorelines and adjacent coastal environments. The CPRA has stated that 75 percent of Louisiana's land loss will be attributed to rising seas through 2067.¹⁹⁵ Coastal Louisiana faces some of the world's highest rates of relative sea-level rise, at 12±8 mm per year.¹⁹⁶ The sea-level is rising more rapidly along the Gulf Coast because coastal lands are sinking, compounding the impacts of sea-level rise in these areas. Louisiana has been losing roughly 25 square miles of land per year in recent decades.¹⁹⁷

¹⁹³ See *Se. Alaska Conservation Council v. Fed. Highway Admin.*, 649 F.3d 1050, 1056-59 (9th Cir. 2011) (agency violated NEPA by failing to consider alternative of improving existing transit infrastructure instead of proposed project to build new road and ferry terminal).

¹⁹⁴ Governor's Advisory Commission on Coastal Protection, Restoration, and Conservation August 3, 2016 - 2017 Coastal Master Plan Planning for an Uncertain Future, *available at* <https://cims.coastal.louisiana.gov/recorddetail.aspx?root=0&sid=18787> (attached).

¹⁹⁵ "Haase said state land-loss modeling concluded that 75% of the marsh loss [modeled from 2017 to 2067] was attributed to rising water levels." See Mark Schleifstein, *'We're screwed': The only question is how quickly Louisiana wetlands will vanish, study says*, NOLA.com (May 22, 2020), *available at* https://www.nola.com/news/environment/article_577f61aa-9c26-11ea-8800-0707002d333a.html (attached).

¹⁹⁶ Jankowski, K., Tornqvist, T. & Fernandes, A., *Vulnerability of Louisiana's coastal wetlands to present-day rates of relative sea-level rise*, Nat. Commun. 8, 14792 (2017) *available at* <http://dio.org/10/1038/ncomms14792> (attached).

¹⁹⁷ EPA, *What Climate Change Means for Louisiana*, Aug. 2016, *available at* <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-la.pdf> (attached).

In 2022, NOAA issued a new study—the *Sea Level Rise Technical Report*—that addresses the latest data regarding sea level rise risks in the U.S.¹⁹⁸ This new data represent significant new information because Louisiana has the highest relative rise in sea level of anywhere in the U.S.; storms and hurricanes are common in Louisiana and could happen at any time, as aptly demonstrated by the 2021 and 2020 Hurricane Seasons; and the Lake Charles LNG Project is at risk of serious flooding. Sea level rise increases the risks to LNG tanker traffic and risks of site flooding worse by increasing the height of both storm surge and waves.¹⁹⁹ The NOAA report discusses sea level rise as a factor in analyzing the intensity and extent of impacts (e.g. height of waves and storm surge) and the need for mitigation (i.e. height of docks, levees, etc.).²⁰⁰ This also bears on the increasing number and severity of storms, which in turn bears on the project design and the need to preserve wetlands as storm buffers and for flood control, which are critical wetlands functions.²⁰¹ NOAA projects that “sea levels along the coastline will rise an additional 10-12 inches by 2050[.]”²⁰² The report also predicts an “increase in the frequency of coastal flooding, even in the absence of storms or heavy rainfall.”²⁰³ This, combined with a subsidence rate of over 22 mm per year—the highest rates along the western Gulf states—makes sea level rise

¹⁹⁸ *U.S. coastline to see up to a foot of sea level rise by 2050*, NOAA, available at <https://www.noaa.gov/news-release/us-coastline-to-see-up-to-foot-of-sea-level-rise-by-2050> (Feb. 15, 2022) [hereinafter “NOAA News Release”] (attached); see also *Global and Regional Sea Level Rise Scenarios for the United States*, NOAA, available at <https://aambpublicoceanservice.blob.core.windows.net/oceanserviceprod/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf> (Feb. 2022) (attached) [hereinafter “NOAA Report”].

¹⁹⁹ NOAA News Release, *supra* note 198, (“[T]he sea level rise expected by 2050 will create a profound increase in the frequency of coastal flooding, even in the absence of storms or heavy rainfall.”).

²⁰⁰ See NOAA Report, *supra* note 198, at xiii, 2, 41, 60.

²⁰¹ See Louisiana’s *Comprehensive Master Plan for a Sustainable Coast*, Coastal Protection and Restoration Authority of Louisiana, available at <http://coastal.la.gov/wp-content/uploads/2017/01/DRAFT-2017-Coastal-Master-Plan.pdf> (last visited June 6, 2022); see also *Wetlands: Protecting Life and Property from Flooding*, EPA, available at <https://www.epa.gov/sites/default/files/2016-02/documents/flooding.pdf> (May, 2006); see also *Incorporating Wetland Restoration and Protection into Planning Documents*, EPA, available at <https://www.epa.gov/wetlands/incorporating-wetland-restoration-and-protection-planning-documents>; see also, Shepard *et al.*, *The Protective role of Coastal Marshes: A Systemic Review and Meta-analysis*, PLOS ONE, available at <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0027374> (Nov. 23, 2011) (discussing three ecosystem services associated with coastal wetlands: wave attenuation, shoreline stabilization, and floodwater attenuation.).

²⁰² NOAA News Release, *supra* note 198, see also NOAA Report, *supra* note 198.

²⁰³ NOAA News Release, *supra* note 198.

a climate and safety problem that DOE must address in determining whether the Lake Charles LNG Project is in the public interest.²⁰⁴

DOE must also evaluate the effects that increasingly severe extreme weather will have on the project, including the dangers posed to LNG tankers transporting exported gas. Significant new information about climate-driven extreme weather like hurricanes has emerged since FERC's 2015 EIS. For example, in recent years, the Gulf of Mexico has had above-average hurricane seasons. In 2019, five tropical cyclones formed in the Gulf of Mexico, tying the records from 2003 and 1957. Twenty tropical cyclones made landfall in the United States in 2020, breaking a record set in 1916. The 2021 hurricane season produced 21 named storms, four of which were major hurricanes.²⁰⁵

More broadly, the IPCC's February 2022 report—on *Impacts, Adaptation, and Vulnerability*—highlights the increasing climate-related risks to coastal infrastructure like the Lake Charles LNG Project. Because “[c]limate change impacts and risks are becoming increasingly complex and more difficult to manage,” it is increasingly likely that “multiple climate hazards will occur simultaneously, . . . compounding overall risk[.]”²⁰⁶ 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,”²⁰⁷ 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

²⁰⁴ Dokka, R., Shinkle K., *Rates of vertical displacement at benchmarks in the lower Mississippi Valley and the North Gulf Coast*, NOAA, available at <http://geodesy.noaa.gov/heightmod/NOAANOSNGSTR50.pdf> (July 2004) (attached).

²⁰⁵ *Active 2021 Atlantic hurricane season officially ends*, NOAA, available at <https://www.noaa.gov/news-release/active-2021-atlantic-hurricane-season-officially-ends> (Nov. 30, 2021).

²⁰⁶ See *Climate Change 2022 Impacts, Adaptation and Vulnerability, Summary for Policy Makers*, IPCC, at 8, A.3, available at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf (Feb. 2022) (attached) [hereinafter “IPCC Impacts Summary”].

²⁰⁷ *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).”).

key economic sectors in North America.²⁰⁸ 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 longterm (high confidence).”²⁰⁹ 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).”²¹⁰ The IPCC also highlights that “siting of infrastructure” has already “contributed to the exposure of more assets to extreme climate hazards increasing the magnitude of the losses (high confidence).”²¹¹

DOE must address these increasingly severe risks in determining whether the Lake Charles LNG Project is in the public interest. Even if DOE dismisses concerns about risks to the LNG terminal itself as within FERC’s purview, the increasing frequency and intensity of severe storms will impact the safety of LNG tanker traffic needed to transport LCE’s exports to the global market. At a minimum, DOE must examine the extent of the risk posed to LNG tankers throughout the lifespan of LCE’s requested export authorization.

v. DOE Must Examine the Projects Impacts on the Newly-Listed Rice’s Whale

In 2019, well after FERC’s 2015 EIS and DOE’s previous authorizations, the Rice’s whale was listed under the Endangered Species Act, and requiring a re-evaluation of the project’s impacts. The Lake Charles LNG Project has the potential to adversely affect the Rice’s whale, which is one of the most endangered whales in the world.²¹² It is the only resident baleen whale in the Gulf of Mexico and is closely related to the Bryde’s whale.²¹³ The Rice’s whale faces a myriad of threats, with the most significant threats being “energy exploration and development, oil spills and spill response, vessel strikes, ocean noise, ocean debris, aquaculture, and entanglement in

²⁰⁸ *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.

²⁰⁹ *Id.* at SPM.B.5.2.

²¹⁰ *Id.* at SPM.C.2.1.

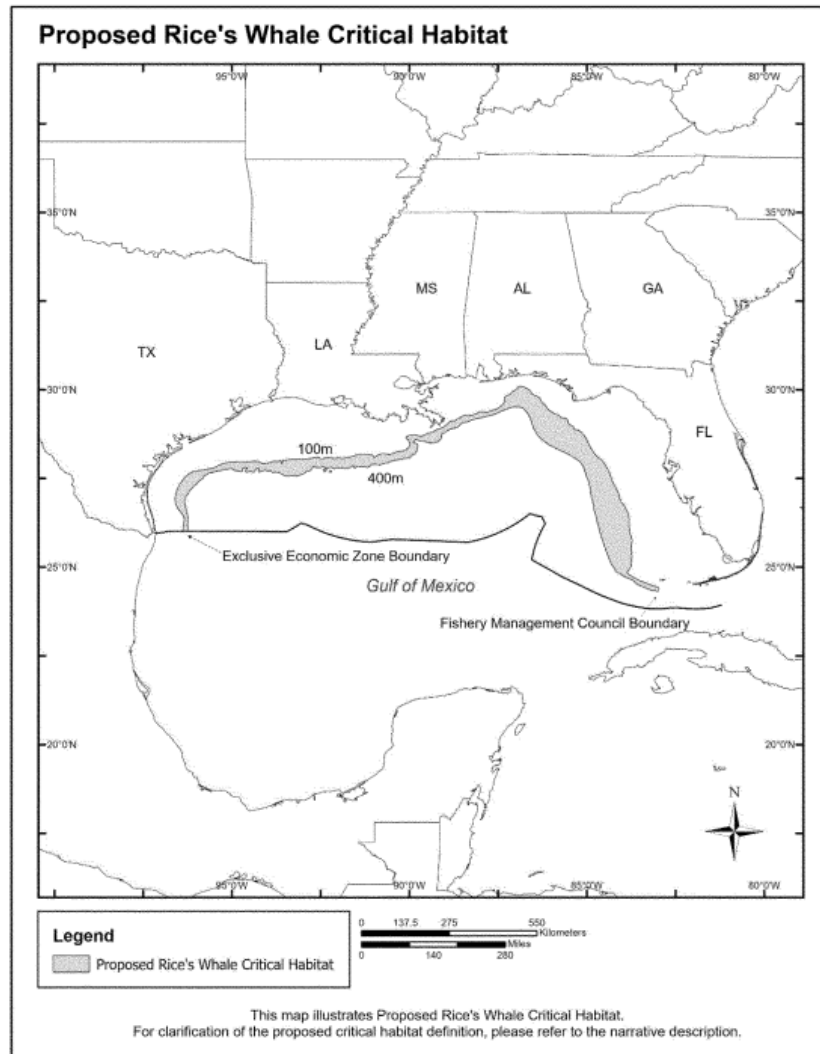
²¹¹ *Id.* SPM.B.1.6.

²¹² Rice’s Whale, NOAA, <https://www.fisheries.noaa.gov/species/rices-whale> (last visited June 2, 2022).

²¹³ *Id.*

fishing gear.”²¹⁴ Thus, DOE must take a hard look at the Rice’s whale’s vulnerability to these threats, including vessel strikes and noise pollution, which will increase if the Lake Charles LNG Project is approved.

The Lake Charles LNG Project will involve approximately 225 LNG tanker trips annually during operation,²¹⁵ including through proposed critical habitat for the Rice’s whale. In July 2023, the National Oceanic and Atmospheric Administration proposed to designate critical habitat for the Rice’s whale throughout the Gulf of Mexico, as depicted in the map below.²¹⁶



²¹⁴ *Id.*

²¹⁵ FEIS at 4-25.

²¹⁶ Endangered and Threatened Species; Designation of Critical Habitat for the Rice’s Whale, 88 Fed. Reg. 47,453, 47,472 (July 24, 2023).

This new critical habitat designation, if finalized, will include the vast majority of routes to carry LNG from Southwest Louisiana to the global market. The Rice’s whale’s habitat already experiences a high amount of vessel traffic.²¹⁷ Vessel traffic coupled with the “size and speed of transiting vessels, the overlap between key habitats and shipping lanes, and the animal’s behavior and time spent near the surface” all contribute to the probability of ship strikes.²¹⁸ Rice’s whales are particularly vulnerable to ship strikes given that results from a tagged Rice’s whale individual shows that it spent 70% of its time within 15 m of the surface.²¹⁹ Moreover, there has been at least one documented ship strike fatality of a Rice’s whale.²²⁰ In addition to being at risk of vessel strikes, the Rice’s whale is also negatively impacted by noise pollution. The increase in vessel traffic will create low frequency noise which overlaps with the hearing range of the Rice’s whale and likely inhibits its performance of critical life functions such as “communication, navigation, finding a mate, locating prey, and predator avoidance.”²²¹

DOE therefore must consider the proximity of the vessel routes to the Rice’s whales’ habitat as well as the fact that the Rice’s whale may venture closer to shore and outside of their core area.²²² DOE must also evaluate the implementation of adequate mitigation measures to avoid vessel strikes at night and increases in noise near the Rice’s whale core habitat. Doing this analysis requires DOE to conduct a new or Supplemental EIS, at a minimum. DOE must also comply with the Endangered Species Act, which requires consultation with NOAA about potential impacts to the Rice’s whale that will be caused by the Lake Charles LNG Project.

vi. DOE Must Evaluate New Data and Information About the Project’s Contribution to Climate Change.

Mounting scientific evidence—released since FERC’s 2015 EIS and DOE’s general studies—demonstrates that the consequences of and risk to LNG infrastructure from catastrophic

²¹⁷ Rice’s Whale, NOAA, *supra* note 213.

²¹⁸ Aaron N. Rice, *Possible Risks to Marine Protected Species from the Construction and Operation of the Delfin LNG Offshore Terminal*, at 23 (Feb. 2, 2022) (attached) [hereinafter “Possible Risks to Marine Protected Species”].

²¹⁹ Possible Risks to Marine Protected Species, *supra* note 147, at 23.

²²⁰ *Id.* (cetacean fatalities from vessel strikes are often difficult to document).

²²¹ Rice’s Whale, NOAA, *supra* note 213 (“As ocean noise levels increase, the resulting habitat degradation and disruption to these life functions can result in adverse physical and behavioral effects to Rice’s whales.”).

²²² *Id.*

climate change are even more severe than previously assumed. Continuing LNG exports through 2050 is inconsistent with reaching any of the Biden administration’s climate targets and preventing the worst impacts from catastrophic climate change. Moreover, since 2019, new information and analytical tools have emerged that better facilitate DOE to evaluate the Lake Charles LNG Project’s climate impacts. DOE must conduct the requisite NEPA analysis and make its public interest determination based on these current circumstances and latest analytical tools.

a. Social Cost of Greenhouse Gases

NEPA requires DOE to use, *inter alia*, “theoretical approaches or research methods generally accepted in the scientific community.” 40 C.F.R. § 1502.21(c)(4). One such method is the social cost of greenhouse gas protocol. *See, e.g., Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321 (D.C. Cir. Aug. 3, 2021) (holding that FERC’s failure to evaluate the significance of greenhouse gas emissions was arbitrary when FERC failed to address whether social cost of carbon was such a method). Even if the social cost of greenhouse gases wasn’t generally accepted or sufficiently developed at the time of FERC’s 2015 EIS, significant new developments in the use of this tool require DOE to utilize it here.

For example, In January 2021, President Biden issued Executive Order 13,990, which established and directed an Interagency Working Group to evaluate and update the social cost of greenhouse gases based on the best available science, building on the recommendations of the National Academies from 2017. Consistent with this directive, the working group recently released interim social cost estimates in its “Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide” (Feb. 2021).²²³ In 2022, the EPA released its own draft analysis incorporating recent scientific advances.²²⁴ And in September 2023, President Biden instructed all federal agencies to use social costs in budgeting, procurement, and NEPA reviews.²²⁵ As such, using social cost to estimate the impact of greenhouse gas emissions is

²²³ Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, Technical Support Document: Social cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990, (February 2021), *available at* https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf (attached)

²²⁴ Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances, EPA (September 2022), *available at* https://www.epa.gov/system/files/documents/2022-11/epa_scghg_report_draft_0.pdf (attached).

²²⁵ FACT SHEET: Biden-Harris Administration Announces New Actions to Reduce Greenhouse gas Emissions and Combat the Climate Crisis, (Sept. 21, 2023): <https://www.whitehouse.gov/briefing->

clearly generally accepted. And consistent with President Biden’s directive and the latest available science, DOE should utilize the social cost of greenhouse gases, or identify another tool, to evaluate the significance of the Lake Charles LNG Project’s greenhouse gas emissions.

b. New Reports on LNG Export’s Environmental Impacts

DOE must also consider the implication of a new report, published in September 2023, that estimates the lifecycle methane emissions from LNG exports and climate damages stemming from US fossil fuel exports.²²⁶ The study concludes that, when fossil fuel exports are included, U.S. greenhouse gas emissions from energy are expected to remain above 2005 levels through 2050.²²⁷ This creates a blatant conflict with the U.S.’s commitment to net zero energy by 2050. The report also concludes that climate damages in 2050 resulting from U.S. fossil fuel exports will be between \$6.1 and \$18.7 trillion under the “high oil and gas supply” scenario.²²⁸ That’s between \$2 and \$6 trillion more than under the “low oil and gas supply” scenario. DOE must evaluate whether this new information about the cost of LNG exports renders the purported benefits of those exports obsolete.

c. The IPCC’s 6th Assessment Report

Three recent documents from the International Panel on Climate Change’s (“IPCC”) 6th Assessment Report emphasize the inevitability of a climate-destabilized future absent urgent and aggressive carbon emission reductions, highlighting the need to curb GHG emissions *now*. Even if LNG exports were reasonable in the short term (they are not), approving new exports that won’t even come online until nearly 2030 flies in the face of mounting scientific evidence about how to avoid the worst impacts of catastrophic climate change.

First, 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

room/statements-releases/2023/09/21/fact-sheet-biden-harris-administration-announces-new-actions-to-reduce-greenhouse-gas-emissions-and-combat-the-climate-crisis/ (attached).

²²⁶ Jeremy Symons, Exporting Carbon at 7-16 (Sept. 2023) (attached); *see also* Bill McKibben, *A Smoking Gun for Biden’s Big Climate Decision?*, THE NEW YORKER (Oct. 31, 2023), available at <https://www.newyorker.com/news/daily-comment/a-smoking-gun-for-bidens-big-climate-decision> (attached).

²²⁷ Exporting Carbon at 9.

²²⁸ *Id.* at 10.

across the globe.”²²⁹ Evidence demonstrating the link between human GHG emissions and extreme weather “has strengthened since” the prior IPCC report.²³⁰ In addition, global warming “has caused global mean sea level rise.”²³¹ Particularly relevant to projects along the Gulf Coast, 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).”²³²

Looking to the future, *The Physical Science Basis* also concludes that cutting GHG emissions now is critical because “there is a near-linear relationship” between human-caused GHG 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% increase in the intensity of extreme daily precipitation events (*high confidence*).²³³ 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.”²³⁴

Second, the IPCC’s February 2022 report—on *Impacts, Adaptation, and Vulnerability*—again concludes, with *very high confidence*, that the severity of climate change risks “depend[s] strongly on near-term mitigation and adaptation actions” and projected risks and losses “escalate with every increment of global warming.”²³⁵ 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).²³⁶

²²⁹ See Climate Change 2021: The Physical Science Basis, Summary for Policymakers, IPCC, available at <https://www.ipcc.ch/report/ar6/wg1/> (Oct. 2021) (attached) [hereinafter “IPCC Physical Science Summary”].

²³⁰ *Id.* at 8, A.3.

²³¹ *Id.* at 11, A.4.3.

²³² *Id.* at 25, C2.6.

²³³ *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.

²³⁴ *Id.* at 28, D.1.1.

²³⁵ *Id.* at SPM.B.4.

²³⁶ *Id.* at SPM.C.2.

Third, the IPCC’s April 2022 *Mitigation of Climate Change* report²³⁷ 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 GHG emissions reductions must undergo “an unprecedented acceleration” between 2030 and 2050 (medium confidence).²³⁸ Without additional abatement, projected GHG “emissions over the lifetime of existing and currently planned fossil fuel infrastructure” will result in global warming over 1.5°C.²³⁹ Moreover, to reduce GHG 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.”²⁴⁰ On the other hand, “[t]he continued installation of unabated fossil fuel infrastructure will ‘lock-in’ GHG emissions” (high confidence).²⁴¹ The required transition in the energy sector “is projected to reduce international trade in fossil fuels.”²⁴² Because 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),²⁴³ reiterating the risk that new LNG facilities like Lake Charles LNG must cease operations well before the end of their projected lifetimes.

In short, the IPCC’s AR6 reports add to the mounting evidence demonstrating the dual climate risks associated with the Lake Charles LNG facility: (1) that the facility’s staggering GHG 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.

²³⁷ 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).

²³⁸ *Id.* at B.6.3.

²³⁹ *Id.* at B.7.

²⁴⁰ *Id.* at C.4.

²⁴¹ *Id.*

²⁴² *Id.* at C.4.4.

²⁴³ *Id.*

d) *DOE Must Consider GHG Impacts from the Entire LNG Lifecycle.*

As discussed in Section II.B.3.b above, 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. Similarly, NEPA requires DOE to take a hard look at reasonably foreseeable impacts across the LNG lifecycle, including upstream impacts relating to the production and supply of the gas that is exported, and downstream impacts relating to transportation and use of exported LNG. These reasonably foreseeable impacts include greenhouse gas emissions. Specifically, although non-climate impacts may be location-dependent and therefore difficult to foresee, location is in many ways irrelevant to the analysis of greenhouse gas emissions, as DOE has admitted.²⁴⁴ In a closely related context regarding FERC's approval of interstate gas pipelines, the D.C. Circuit has repeatedly affirmed that the Natural Gas Act and NEPA require analysis of reasonably foreseeable upstream and downstream effects. *Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017) ("*Sabal Trail*"); *Food & Water Watch v. FERC*, 28 F.4th 277, 288-89 (D.C. Cir. 2022).

These holdings apply with equal force to DOE's approval of LNG exports. The D.C. Circuit did not hold otherwise in *Sierra Club v. Dep't of Energy*, 867 F.3d 189 (2017) ("*Freeport II*"), decided shortly before *Sabal Trail*. In recent orders, DOE has suggested that *Freeport II* categorically excused DOE from considering exports' effects caused by increased gas production; but DOE has mischaracterized that case.²⁴⁵ *Freeport II* first noted that Sierra Club had not disputed that DOE could rely on materials other than the EIS to meet DOE's NEPA obligations, and the Court therefore assumed, without deciding, that such reliance was permissible.²⁴⁶ 867 F.3d at 197. *Freeport II* then credited DOE for examining upstream impacts in the Addendum and LNG Lifecycle report. *Id.* at 198, 200, 202. The issue was not whether

²⁴⁴ E.g., Final Environmental Addendum at 2 ("*With the exception of greenhouse gases (GHG) and climate change, potential impacts of expanded natural gas production and transport would be on a local or regional level.*") (emphasis added).

²⁴⁵ See, e.g., Order 3909-C at 20-21; Order 3878-e at 19-22.

²⁴⁶ We challenge such reliance here, as explained *supra*.

“effects pertaining to increased [natural] gas production were not reasonably foreseeable” *at all*;²⁴⁷ the issue was whether DOE acted arbitrarily in concluding that these effects could not be foreseen *in additional detail*. Thus, DOE must examine the indirect and direct GHG impacts of the Lake Charles LNG Project before approving this application.

More broadly, effects occurring upstream and downstream of the point of export are plainly the types of indirect effects that NEPA requires agencies to consider. In determining what effects can be attributed to the proposed action, and that therefore must be included in the scope of NEPA review, courts have analogized the concept of “proximate cause” in tort law. *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 754 (2004). Thus, at a minimum, NEPA requires analysis of the “normal consequence[s]” of the action under review, regardless of whether a link in the chain of events is a third party acting predictably. Restatement (Second) of Torts §§ 440-443 (1965). The NEPA regulations DOE must apply here reflect this principle by requiring analysis of “reasonably foreseeable” indirect effects, including “growth inducing” effects. 40 C.F.R. § 1508.1(g)(2). Here, the prior analyses on which DOE intends to rely here,²⁴⁸ all predict that exports will lead to increased gas production; an increase in production is a normal, and often intended, consequence of additional exports.

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

e) 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.

LCE seeks authorization to export gas through 2050.²⁴⁹ Because LCE’s existing export authorization will expire, LCE will not be able to export any gas without this new authorization.²⁵⁰ DOE therefore must take a hard look at the environmental impact of expanded exports of LNG across that twenty plus-year time period, with the long-term gas production and

²⁴⁷ Order 3909-C at 21 (quoting *Freeport II*, 867 F.3d at 198).

²⁴⁸ Notice of Application, 88 Fed. Reg. at 60,671 (indicating that DOE intends to consider the 2014 Addendum, 2014 Life Cycle Perspective, 2018 Macroeconomic Outcomes study, and 2019 Life Cycle Update when reviewing LCE’s application).

²⁴⁹ Application at 1.

²⁵⁰ *Id.* at 4 (“LCE will not be able to “commence export operations using the planned liquefaction facilities” by December 16, 2025).

use such exports necessarily entail. As noted, while DOE is free to explicitly incorporate the 2014 and 2019 lifecycle analyses into its NEPA analysis of this issue, those analyses are both procedurally insufficient to meet DOE's NEPA and Natural Gas Act obligations here.

Procedurally, the 2014 and 2019 lifecycle analyses are not a substitute for NEPA review, as DOE continues to recognize.²⁵¹ *See supra* Section II.B.3.a. 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. This includes addressing whether such impacts are consistent with the United States' climate goals. They are not. But the 2014 and 2019 lifecycle analyses do not address this issue. That is, the analyses do not provide any discussion of whether increasing or extending LNG exports will help or hinder achievement of the long-term drastic emission reductions that are essential to avoiding the most catastrophic levels of climate change.

i. The Impact of U.S. LNG Exports on Domestic GHG Emissions Is Foreseeable, and DOE Must Analyze It Here.

Even if DOE is incapable of reasonably forecasting how increased exports will influence overseas emissions (it is not, as discussed below), there is no doubt that increasing exports will increase domestic emissions associated with gas production and liquefaction.²⁵² Studies DOE relies on in the lifecycle analyses indicate that if the 851 bcf/year of exports proposed here draw entirely on new gas production, this production will emit nearly 5.8 million metric tons per year of carbon dioxide equivalent.²⁵³ To the extent that these 851 bcf/y of exports are supplied by displacement of other domestic gas demand (e.g., gas-to-coal shifting in the electric sector), rather than an increase in domestic production, the impact on domestic emissions will likely be even higher.²⁵⁴ And the cumulative problem is immense: to date, the Department has authorized

²⁵¹ *E.g.*, 85 Fed. Reg. at 78,202 (The life cycle "reports are not part of DOE's NEPA review process").

²⁵² *See, e.g.*, Final Environmental Addendum at 44, 2019 Lifecycle GHG Update at 23.

²⁵³ Final Environmental Addendum at 44 (estimating 6.8 million metric tons of CO₂e emissions per trillion cubic feet of gas produced); *but see* 2019 Lifecycle GHG Update (acknowledging changes to estimates used in the 2014 Final Environmental Addendum).

²⁵⁴ *See, e.g.*, EIA, Effects of Increased Natural Gas Exports on Domestic Energy Markets, at 18-19 (Jan. 2012) *available at* https://www.eia.gov/analysis/requests/fe/pdf/fe_lng.pdf.

18.2 trillion cubic feet per year of exports to non-free trade agreement countries.²⁵⁵ Producing the gas to supply these exports will collectively increase domestic emissions by roughly 124 million metric tons of carbon dioxide equivalent per year. In contrast, FERC recently proposed to treat projects with lifecycle CO₂e emissions above 100,000 tpy as significant.²⁵⁶ DOE must disclose and analyze the entirely foreseeable and presumptively-significant volume of upstream emissions; it cannot refuse to do so “just because the emissions in question might be partially offset by reductions elsewhere.” *Sierra Club v. FERC*, 867 F.3d 1357, 1374-75 (D.C. Cir. 2017) (“Sabal Trail”); *accord WildEarth Guardians v. U.S. Bureau of Land Mgmt.*, 870 F.3d 1222, 1236 (10th Cir. 2017).

Even if overseas offsets were perfectly foreseeable (they are not), DOE would still need to discuss impacts on domestic emissions. The U.S.’s own emission reduction goals, and international climate agreements to which the U.S. is a party, specifically call on the U.S. to address territorial emissions, regardless of whether domestic emission increases might be offset by foreign emission reductions.²⁵⁷ Compliance with commitments made under the Paris Accord is evaluated based on “greenhouse gas emissions and removals taking place within national territory and offshore areas over which the country has jurisdiction.”²⁵⁸ There are sound policy reasons for these agreements’ focus on domestic emissions. As DOE itself acknowledges, impacts on domestic emissions can be more reasonably verified than impacts in other countries; asking each country to demonstrate reductions in domestic emissions improves both accuracy and accountability. In addition, it would be unfair and thus nonstrategic for the U.S. to argue that although the world must transition away from fossil fuels as quickly as possible for climate reasons, the U.S. can enjoy the purported economic benefits of increased fossil fuel production, based on the argument that our increased emissions will be offset by other nations’ reductions.

²⁵⁵ 88 Fed. Reg. at 25,274.

²⁵⁶ FERC, Interim Policy Statement on Consideration of Greenhouse Gas Emissions in Natural Gas Infrastructure Reviews, Dkt. PL21-3, 187 FERC ¶ 61,108 P79 (Feb. 18, 2022).

²⁵⁷ See Sierra Club Comments on 2019 Lifecycle Report at 10, *available at* <https://fossil.energy.gov/app/DocketIndex/docket/DownloadFile/604>; Sierra Club Comments on 2014 Lifecycle Report at 12-14, *available at* <https://fossil.energy.gov/app/DocketIndex/docket/DownloadFile/180>.

²⁵⁸ Intergovernmental Panel on Climate Change, 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 8: Reporting and Tables, at 8.4 *available at* https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/1_Volume1/19R_V1_Ch08_Reporting_Guidance.pdf (attached).

And other countries are generally more likely to meet their GHG reduction commitments if the U.S. satisfies our own.

Executive Order 14,008, Tackling the Climate Crisis at Home and Abroad,²⁵⁹ affirms that “[r]esponding to the climate crisis will require ... net-zero global emissions by mid-century or before.”²⁶⁰ As an interim step, President Biden has announced a “commitment to reduce U.S. emissions by 50-52% from 2005 levels in 2030.”²⁶¹ Increasing LNG exports is likely to interfere with achieving these goals, and that interference is both contrary to the public interest, as interpreted for purposes of the Natural Gas Act, and an effect that must be analyzed under NEPA. But DOE entirely failed to consider the impact of LNG exports, individually or cumulatively, on efforts to attain U.S. emission reduction targets. Although DOE previously concluded that it was difficult to predict where gas would come from in general, here, DOE has the benefit of LCE’s statements that it conducts extensive upstream activities itself and that it anticipates obtaining supply gas from “Texas and Louisiana producing regions and the offshore Gulf producing regions.”²⁶²

ii. Globally, DOE Can Foresee That Increased LNG Exports Are Incompatible with Emission Reduction Targets.

Globally, avoiding catastrophic climate change by limiting global warming to 1.5° C—or even 2° C—will require drastic reductions in global emissions, which can only be achieved by phasing out fossil fuels as quickly as possible.²⁶³ The world must transition to net-zero emissions by 2050, and reduce global carbon dioxide (CO₂) emissions by 45 percent by 2030—we need “rapid, deep and sustained reductions in global greenhouse gas emissions.”²⁶⁴ According to the United Nations Intergovernmental Panel on Climate Change (IPCC), to achieve these reductions, we must move to renewable energy as extensively and as quickly as possible.²⁶⁵ The

²⁵⁹ 86 Fed. Reg. 7619 (Jan. 27, 2021).

²⁶⁰ *Id.* § 101, 86 Fed. Reg. at 7619.

²⁶¹ FACT SHEET: Renewed U.S. Leadership in Glasgow Raises Ambition to Tackle Climate Crisis, *supra* note 81

²⁶² Application at 38.

²⁶³ Sierra Club Comments on 2019 Lifecycle Report, *supra* note 260, at 4-5; Sierra Club Comments on 2014 Lifecycle Report, *supra* note 260 at 12-15.

²⁶⁴ 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).

²⁶⁵ *See, e.g.*, IPCC Physical Science Summary, *supra* note 231.

International Energy Agency (IEA) similarly concludes that, globally, “there is no need for investment in new fossil fuel supply in our net zero pathway.”²⁶⁶ And even under the business as usual scenario, the IEA’s latest report concludes that LNG export facilities *in operation or under construction* provides “ample” global supply until at least 2040.²⁶⁷ Accordingly, Executive Order 14,008 instructs federal agencies to discourage “high carbon investments” or “intensive fossil fuel-based energy.”²⁶⁸ Global LNG export volumes, specifically, must *decline* below present levels in just the next few years: as the International Energy Agency recently affirmed, further expansion of LNG export facilities cannot be part of the path to net-zero emissions.²⁶⁹

Despite this broad consensus, and the fact that U.S. LNG exports are significantly reshaping the U.S. and global energy landscapes, DOE has never measured U.S. LNG exports against the world we need to achieve, instead solely comparing U.S. LNG exports to the energy landscape we have now. The only questions asked by DOE’s lifecycle analyses are “How does exported LNG from the United States compare with” other fossil fuels (coal or other gas) currently used “in Europe and Asia, from a life cycle [greenhouse gas] perspective?”²⁷⁰ Global warming in excess of 2° C, or even 1.5° C, will have tremendous foreseeable environmental impacts and be contrary to the public interest. But DOE entirely failed to consider whether the exports authorized here, which are permitted through 2050, would make it less likely that other countries will achieve the emissions reductions necessary to limit global warming to these levels. DOE therefore failed to consider an important factor weighing on the public interest, and failed to take the hard look required by NEPA.

iii. Reasonable Forecasting Indicates that Additional U.S. LNG Exports Will Increase Global Emissions Even in the Intermediate Term.

While DOE fundamentally failed to ask the right questions in its general studies, multiple sources of evidence enable DOE to reasonably forecast where additional LNG from the Lake Charles LNG Project might go. As discussed above, any additional demand from Europe will

²⁶⁶ IEA, *Net Zero by 2050*, at 11 (May 2021), *supra* note 14.

²⁶⁷ *World Energy Outlook 2023* at 139.

²⁶⁸ Executive Order 14,008, 86 Fed. Reg. 7619, at § 102(f), (h) (Jan. 27, 2021).

²⁶⁹ IEA, *Net Zero by 2050*, at 102.

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

likely be limited to the short or intermediate term, expiring far before the authorization's 2050 expiration.

Here, DOE has the benefit of at least six contracts for proposed gas delivery,²⁷¹ and LCE's statements about the specific needs for the gas deliveries: namely, operation of gas plants in Japan and South Korea.²⁷² But as noted, Japan plans to cut GHG emissions by 46% by 2030 by boosting renewable energy to double 2019 levels and cutting the share of LNG in the national electricity mix by 1% by 2030.²⁷³ Similarly, South Korea plans to cut LNG back to just 9.3% of the country's power mix by 2036, down from almost 30% in 2021."²⁷⁴ Therefore, project-specific information in this record contradicts DOE's prior assumptions that LNG exports will only displace other fossil fuels.

Other evidence also indicates how these receiving markets will shift in response to additional LNG. Peer reviewed research concludes that US LNG exports are likely to play only a limited role in displacing foreign use of coal.²⁷⁵ Thus, while DOE may have thought that common sense suggested that LNG would primarily compete against other fossil fuels in 2014, when the first life cycle analysis report was published, subsequently-developed evidence shows that this unlikely to be the case, and DOE has not provided any evidence suggesting that LNG exports will primarily compete with coal or other sources of gas.

Even if, after taking a hard look at this additional information, DOE reaffirms its assertion that it cannot reasonably forecast how, individually or cumulatively, additional U.S. LNG exports will displace coal, other gas, renewables, or conservation, DOE must provide additional analysis of the range of possible outcomes. In its general studies, DOE has juxtaposed U.S. LNG with other sources of fossil fuels, but has failed to provide similar juxtaposition for renewables and conservation. This is inconsistent with recent forecasts that increasingly

²⁷¹ Office of Fossil Energy and Carbon Management, Lake Charles Facility Long-Term Contract Information and Registrations at U.S. LNG Export Facilities, *available at* <https://www.energy.gov/fecm/articles/lake-charles-facility> (last visited Oct. 30, 2023).

²⁷² Application at 4.

²⁷³ IEEFA 2023-2027 Outlook at 20; Reuters, *Japanese utilities want G7 to allow countries to set their own paths to energy transition*, *supra* note 107.

²⁷⁴ IEEFA 2023-2027 Outlook at 20; Charles Lee, S&P Global Insights, *South Korea to cut LNG in power mix to 9.3% in 2036, sharply raises role of nuclear energy*, *supra* note 108.

²⁷⁵ 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://www.sciencedirect.com/science/article/abs/pii/S0360544217319564> (attached).

anticipate global reliance on renewable energy.²⁷⁶ Providing only one comparison but not the other presents a misleadingly incomplete picture, especially where DOE concedes that *some* displacement of renewables will occur. If DOE were to provide this analysis, it would show that while the difference between U.S. LNG and other fossil fuels may not be great, the difference between LNG and renewables or conservation is stark. This analysis would reveal what percentage of exported LNG must displace other fossil fuels to avoid increasing emissions, relative to the status quo. Simply identifying that threshold would provide meaningful information to the public and to decisionmakers. For example, if DOE were to determine that the breakeven point is 98% displacement of other fossil fuels, the public and decisionmakers could form judgments about whether additional LNG exports could plausibly have that little of an impact on renewables and conservation, even absent specific forecasts.

iv. 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 and NRDC have previously explained. 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% of the gas delivered.²⁷⁷ 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%.²⁷⁸ 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.²⁷⁹ Every year, new research further affirms that gas production emits greater

²⁷⁶ See *supra* Section II.B.2.b. See also e.g., IEEFA, Global LNG Outlook 2023-2027.

²⁷⁷ 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>.

²⁷⁸ 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), 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-three-times-national-rate> (attached).

²⁷⁹ 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).

amounts of methane than what DOE's analyses have assumed, despite ongoing efforts to reduce methane emissions.²⁸⁰ At a minimum, DOE must review and to respond to this research before approving any further LNG export applications.

3. Because Extensive Analysis Is Required, DOE Should Reject LCE's Requested Expedited Timeline.

LCE asks DOE to grant its application on an unrealistically fast timeline, without justification. LCE states that the lifespan of the project is 30-50 years; the very small relative delay in DOE's approval is well justified given the potential upsides of DOE taking the time to conduct the robust analysis of impacts on domestic prices, global strategic interests, and the project's extensive environmental harms. Given LCE's lack of progress to date, and its caution about potential future delays, LCE fails to demonstrate why customers with time-sensitive needs won't exercise their termination rights in favor of projects with more momentum, regardless of when DOE issues its decision on this application. Moreover, if the project need is as strong and durable as LCE claims, then that demand will exist when DOE issues its decision after thorough review. Therefore, DOE should take the time it needs to conduct the requisite NEPA and public interest review.

III. Conclusion

For the reasons stated above, For a Better Bayou, Habitat Recovery Project, Healthy Gulf, Louisiana Bucket Brigade, Micah Six Eight Mission, and Sierra Club's motion to intervene should be granted. The proposed application is not consistent with the public interest and should be denied. The Russian invasion of Ukraine demonstrated yet another reason why the world needs to transition away from fossil energy as quickly as possible; LCE's proposal for a project that will not start exports until 2028 is not part of a solution to current geopolitical problems. And 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. Finally, DOE cannot approve the

²⁸⁰ 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); Kayrros, *U.S. Methane Emissions from Fossil Fuels at Risk of Worsening In 2022, Extending 2021 Trend* (June 2022), available at <https://www.kayrros.com/blog/u-s-methane-emissions-from-fossil-fuels-at-risk-of-worsening-in-2022-extending-2021-trend/> (attached); see also McKibben, *supra* note 228.

applications 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. Increasing gas exports and use cannot be reconciled with those goals, and this proposal should be denied.

/s/ Louisa Eberle

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Attorney for Sierra Club

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

SIERRA CLUB CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

Pursuant to 10 C.F.R. § 590.103(b), I, Louisa Eberle, 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 Denver, CO this 6th day of November, 2023

/s/ Louisa Eberle
Louisa Eberle
Sierra Club
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Attorney for Sierra Club

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
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IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

SIERRA CLUB VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Louisa Eberle, 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 Denver, CO on November 6, 2023

/s/ Louisa Eberle
Louisa Eberle
Sierra Club
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(415) 977-5753
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Attorney for Sierra Club

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IN THE MATTER OF)
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Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 590.107, I, Louisa Eberle, 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 November 6, 2023.

/s/ Louisa Eberle

Louisa Eberle

Sierra Club

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(415) 977-5753

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Attorney for Sierra Club

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
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IN THE MATTER OF)
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Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

**FOR A BETTER BAYOU CERTIFIED STATEMENT OF AUTHORIZED
REPRESENTATIVE**

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

Dated at Lake Charles, LA this 6th day of November, 2023

/s/ James Hiatt

James Hiatt
Director, For a Better Bayou
PO Box 7262
Lake Charles, LA 70606
337-515-0655
James@betterbayou.net

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

FOR A BETTER BAYOU VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, James Hiatt, 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 Lake Charles, LA this 6th day of November, 2023

/s/ James Hiatt
James Hiatt
Director, For a Better Bayou
PO Box 7262
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337-515-0655
James@betterbayou.net

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
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Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

HABITAT RECOVERY PROJECT CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

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

Dated at Vinton, LA this 6th day of November, 2023

/s/ Alyssa Portaro
Alyssa Portaro
Founder/Director
Habitat Recovery Project
1636 Arledge Rd
Vinton, LA 70668
alyssaportaro@gmail.com
973-632-1695

UNITED STATES OF AMERICA
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OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

HABITAT RECOVERY PROJECT VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Alyssa Portaro, 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 Vinton, LA this 6th day of November, 2023

/s/ Alyssa Portaro
Alyssa Portaro
Founder/Director
Habitat Recovery Project
1636 Arledge Rd
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alyssaportaro@gmail.com
973-632-1695

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IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

HEALTHY GULF CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

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

Dated at Houston, TX this 6th day of November, 2023

/s/ Naomi Yoder
Naomi Yoder
Staff Scientist
PO Box 66226
Houston, TX 77266
504-525-1528 x213

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

HEALTHY GULF VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Naomi Yoder, 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 Houston, TX this 6th day of November, 2023

/s/ Naomi Yoder
Naomi Yoder
Staff Scientist
PO Box 66226
Houston, TX 77266
504-525-1528 x213

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

**LOUISIANA BUCKET BRIGADE CERTIFIED STATEMENT OF AUTHORIZED
REPRESENTATIVE**

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

Dated at New Orleans, LA this 6th day of November, 2023

/s/ Shreyas Vasudevan
Shreyas Vasudevan
Campaign Researcher
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(504) 484-3433

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DEPARTMENT OF ENERGY
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IN THE MATTER OF)
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LOUISIANA BUCKET BRIGADE VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Shreyas Vasudevan, 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 this 6th day of November, 2023

/s/ Shreyas Vasudevan
Shreyas Vasudevan
Campaign Researcher
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UNITED STATES OF AMERICA
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OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

**MICAH SIX EIGHT MISSION CERTIFIED STATEMENT OF AUTHORIZED
REPRESENTATIVE**

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

Dated at Sulphur, LA this 6th day of November, 2023

/s/ Cynthia P. Robertson
Cynthia P. Robertson
Executive Director
Micah Six Eight Mission
624 W. Verdine
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UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY

IN THE MATTER OF)
)
Lake Charles Exports, LLC) FE Docket No. 23-87-LNG

MICAH SIX EIGHT MISSION VERIFICATION

Pursuant to 10 C.F.R. § 590.103(b), I, Cynthia Robertson, 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 Sulphur, LA this 6th day of November, 2023

/s/ Cynthia P. Robertson
Cynthia P. Robertson
Executive Director
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624 W. Verdine
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