ORAL ARGUMENT NOT YET SCHEDULED

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 20-1045

VECINOS PARA EL BIENESTAR DE LA COMUNIDAD COSTERA, et al.,
Petitioners,

v.

FEDERAL ENERGY REGULATORY COMMISSION,
Respondent,

RIO GRANDE LNG, LLC; RIO BRAVO PIPELINE COMPANY, LLC,
Intervenors for Respondent.


BRIEF OF THE INSTITUTE FOR POLICY INTEGRITY
AT NEW YORK UNIVERSITY SCHOOL OF LAW
AS AMICUS CURIAE IN SUPPORT OF PETITIONERS

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June 17, 2020
CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

As required by Circuit Rule 28(a)(1), counsel for Institute for Policy Integrity at New York University School of Law (“Policy Integrity”) certify as follows:

**Parties:** Except for Policy Integrity, all parties and intervenors appearing in this case are listed in the Opening Brief for Petitioners.

**Rulings Under Review:** The following final agency actions by Respondent are under review:


2) *Rio Grande LNG, LLC*, 170 FERC ¶ 61,046 (Jan. 23, 2020)

**Related Cases:** References to related cases appear in the Opening Brief for Petitioners.
RULE 26.1 DISCLOSURE STATEMENT

The Institute for Policy Integrity (“Policy Integrity”) is a nonpartisan, not-for-profit organization at New York University School of Law. Policy Integrity is dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity has no parent companies. No publicly-held entity owns an interest of more than ten percent in Policy Integrity. Policy Integrity does not have any members who have issued shares or debt securities to the public.
STATEMENT REGARDING SEPARATE BRIEFING, AUTHORSHIP, AND MONETARY CONTRIBUTIONS

This brief is filed with the consent of all parties. Policy Integrity is not aware of any other organizations that plan to file amicus briefs in support of Petitioners. Under Federal Rule of Appellate Procedure 29(a)(4)(E), Policy Integrity states that no party’s counsel authored this brief in whole or in part, and no party or party’s counsel contributed money intended to fund the preparation or submission of this brief. No person—other than the amicus curiae, its members, or its counsel—contributed money intended to fund the preparation or submission of this brief.
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## GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Pursuant to Circuit Rule 28(a)(3), the following is a glossary of acronyms and abbreviations used commonly in this brief:

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<th>Term</th>
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<td>Certificate Order Dissent</td>
<td><em>Rio Grande LNG, LLC</em>, 169 FERC ¶ 61,131 (Nov. 22, 2019) (Glick, Comm’r, dissenting)</td>
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<td>FERC (or the Commission)</td>
<td>Federal Energy Regulatory Commission</td>
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<td>NAAQS</td>
<td>National Ambient Air Quality Standards</td>
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<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<td>NGA</td>
<td>Natural Gas Act</td>
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<td>Policy Integrity</td>
<td>The Institute for Policy Integrity at New York University School of Law</td>
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<td>Project</td>
<td>Rio Grande liquefied natural gas terminal, Rio Bravo natural gas pipeline, and related facilities</td>
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<td>Working Group</td>
<td>Interagency Working Group on the Social Cost of Carbon</td>
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Policy Integrity is a nonpartisan think tank dedicated to improving government decisionmaking through advocacy and scholarship in administrative law, economics, and environmental policy. Policy Integrity has produced extensive scholarship on the balanced use of economic analysis in regulatory decisions and resource management, with a particular focus on the proper scope and estimation of costs and benefits, including the Social Cost of Carbon. Our director, Professor

\(^1\) This brief does not purport to represent the views, if any, of New York University School of Law.

\(^2\) A full list of publications can be found on Prof. Revesz’s faculty profile, [https://its.law.nyu.edu/facultyprofiles/index.cfm?fuseaction=profile.publications&personid=20228](https://its.law.nyu.edu/facultyprofiles/index.cfm?fuseaction=profile.publications&personid=20228).

\(^3\) Available at [https://policyintegrity.org/files/publications/Pipeline_Approvals_and_GHG_Emissions.pdf](https://policyintegrity.org/files/publications/Pipeline_Approvals_and_GHG_Emissions.pdf).
Harnessing this expertise, Policy Integrity has participated in numerous proceedings that consider agencies’ climate analyses—including their use, or nonuse, of the Social Cost of Carbon. See, e.g., Brief for Institute for Policy Integrity as Amicus Curiae, Atl. Coast Pipeline, LLC v. FERC, No. 18-1224 (D.C. Cir. Apr. 12, 2019) (critiquing FERC’s failure to use Social Cost of Carbon); Brief for Institute for Policy Integrity as Amicus Curiae, Del. Riverkeeper Network v. FERC, No. 18-1128 (D.C. Cir. Dec. 28, 2018) (same); Brief for Institute for Policy Integrity as Amicus Curiae, Zero Zone, Inc. v. Dep’t of Energy, 832 F.3d 654 (7th Cir. 2016) (supporting agency’s use of Social Cost of Carbon).

Here, Petitioners argue that FERC’s review of the Project’s environmental impacts pursuant to the National Environmental Policy Act (“NEPA”), and approval of a certificate of public convenience and necessity under the Natural Gas Act (“NGA”), arbitrarily failed to consider the value of climate damages caused by the Project despite the availability of a tool to do so: the Social Cost of Carbon. Policy Integrity’s expertise on the development and use of the Social Cost of Carbon by agencies across the federal government gives it a unique perspective from which to evaluate that claim.

**SUMMARY OF ARGUMENT**

By declining to evaluate the severity of the Project’s climate impacts, yet nonetheless finding that the Project is “environmentally acceptable,” Rehearing
Order at P 110, and “required by the public convenience and necessity,” id. at P 10, FERC fails to engage in reasoned decisionmaking. In effect, the Commission turns a blind eye to one of the Project’s most significant environmental impacts, in violation of both NEPA and the NGA.

FERC’s failure to meaningfully assess the Project’s climate impacts is particularly problematic because a widely used tool that the federal government developed a decade ago—the Social Cost of Carbon—easily facilitates such an assessment. As this brief explains, the Social Cost of Carbon is a well-accepted and easy-to-use tool for attributing climate damages to an amount of greenhouse gas emissions, and weighing the significance of those damages. Applying the most widely endorsed methodology, which estimates that each ton of carbon dioxide emitted in the year 2015 will cause about $44 in climate costs, the Project’s direct greenhouse gas emissions alone—not even including downstream, combustion-related emissions—will cause roughly $400 million per year in climate damages. Needless to say, this massive cost estimate would assist FERC in contextualizing the significance of the Project’s greenhouse gas impacts.

Instead of engaging in any analysis of this sort, however, FERC provides perfunctory quantification of greenhouse gas emissions that, without more, does not provide meaningful context and disregards the requirements of NEPA and the NGA. And while the Commission offers a hodge-podge of excuses for rejecting the Social
Cost of Carbon, its stated rationales are inconsistent with its own description of the tool’s purpose and use, the consensus of experts, and the practice of other federal agencies. Making matters worse, the Commission monetizes some of the Project’s beneficial economic impacts while refusing to monetize climate costs, which “inconsistently and opportunistically frame[s]” the Project’s effects, *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148–49 (D.C. Cir. 2011), and perverts the Commission’s analysis by “put[ting] a thumb on the scale” in favor of the Project, *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1198 (9th Cir. 2008).

For all of these reasons, FERC’s failure to apply the Social Cost of Carbon is unfounded. Moreover, the Commission’s conclusions about the health impacts of ozone emissions contravenes both modern science and established practices of the federal government over decades and under administrations of both parties. Accordingly, this Court should vacate the Certificate Order.

**ARGUMENT**

**I. FERC’s Failure to Evaluate Climate Impacts Using the Social Cost of Carbon Is Unlawful**

As previewed above, FERC’s refusal to consider the severity of the Project’s climate impacts is arbitrary and capricious for multiple reasons. Specifically, the Social Cost of Carbon provides the Commission with an analytical tool that makes such consideration feasible. FERC’s litany of misleading complaints about the Social Cost of Carbon provides no compelling reasons for failing to meet its
mandates under NEPA and the NGA to meaningfully consider climate impacts. And
FERC’s differential treatment of the Project’s economic benefits compared to its
climate costs makes its determination further lopsided and irrational.

A. The Social Cost of Carbon Is a Widely Accepted and Easy-To-Use Tool
for Assessing Climate Impacts

The Social Cost of Carbon is a straightforward and easy-to-apply tool for
estimating a project’s climate damages, and thus—contrary to FERC’s claim—is
indeed “a suitable method for determining whether [greenhouse gas] emissions …
caused by a proposed project will have a significant effect on climate change,”
Rehearing Order at P 103.

The Social Cost of Carbon is a general methodological approach “that can be
used to estimate incremental physical climate change impacts,” as the Commission
acknowledges. Rio Grande LNG Project Final Environmental Impact Statement,
FERC ¶ 61,100, at P 277 (Aug. 10, 2018) (“Atlantic Coast Rehearing Order”)
(acknowledging that the Social Cost of Carbon “estimate[s] the monetized climate
change damage associated with an incremental increase in [carbon dioxide]
emissions”).

The most widely used estimate of the Social Cost of Carbon was developed
by the federal Interagency Working Group on the Social Cost of Carbon (“Working
Group”), a coordinated effort among twelve federal agencies and White House


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Support Document”).\(^5\) Adjusted for inflation, this central estimate equals about $44 per ton in present value.\(^6\)


\(^5\) Available at https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc_tsd_final_clean_8_26_16.pdf. Once emitted, carbon dioxide stays in the atmosphere and contributes to climate damages for centuries. *Id.* at 4. The $44 figure captures that future stream of effects, discounting future damages to present value. *Id.* at 16. Based on the economic literature, the Working Group used a 3 percent discount rate to calculate its central estimate and also calculated the value at rates of 5 percent and 2.5 percent. *Id.* at 19. The range for those analyses is approximately $14 to $68 per metric ton for year 2015 emissions (adjusted for inflation to 2019$). *Id.* at 4. A “high impact” estimate that reflects the potential for more catastrophic outcomes is $129 for year 2015 emissions (similarly adjusted). *Id.* at 16.

\(^6\) We have converted the Working Group’s estimates (presented in 2007$) to present value—as agencies do—using the Bureau of Labor Statistics’ consumer price index, which is available at https://data.bls.gov/timeseries/CUUR0000SA0. As this data provides, 2007$ can be converted to 2019$ by multiplying by approximately 1.233.

\(^7\) Available at https://www.nap.edu/catalog/24651/valuing-climate-damages-updating-estimation-of-the-social-cost-of.

Moreover, as FERC itself has recognized, many other agencies throughout the federal government use the Working Group’s Social Cost of Carbon estimate when crafting regulations and examining regulatory alternatives. See Rehearing Order at P 104; *Mountain Valley Pipeline, LLC*, 163 FERC ¶ 61,197, at P 281 (June 15, 2018). Indeed, since at least 2010, including some actions under the current presidential administration, numerous federal agencies have based their regulatory decisions and NEPA reviews on the Working Group’s central estimate of the Social Cost of Carbon. Earlier this year, for example, the Department of Energy applied

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9 *See Think Global*, 42 Colum. J. Envtl. L. at 270–84 (listing all uses by federal agencies through July 2016).
the Working Group’s estimates, noting that they had “been developed over many years, using the best science available.” 85 Fed. Reg. 1447, 1479 (Jan. 10, 2020).

Applying the Social Cost of Carbon to monetize the Project’s climate consequences is straightforward. To calculate climate impacts in a given year, FERC needed only to multiply the Project’s total quantified greenhouse emissions in that year—a figure it already projected, FEIS Vol. I at 4-262 tbl.4.11.1-7—by the Working Group’s Social Cost of Carbon estimate. Multiplying the Project’s estimated annual direct emissions—up to 9,070,827 metric tons of carbon dioxide equivalent, per FERC’s estimate, Certificate Order at P 108—by the central value for the Social Cost of Carbon—$44 (for year 2015 emissions)—reveals that the Project’s direct emissions will cause roughly $400 million in climate damages annually. Thus, applying the Social Cost of Carbon reveals that the Project is likely

\[ \text{Annual Direct Emissions} \times \text{Social Cost of Carbon} = \text{Climate Damages} \]

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10 FERC converts emissions of other greenhouse gases into carbon dioxide-equivalent units based on their relative climate impacts.

11 Even this value is probably an underestimate. First, because each ton’s marginal impact rises as background atmospheric concentrations increase, the monetized harm of emissions increases each year—meaning that emissions today are valued at more than $44 per ton. See 2016 Technical Support Document at 4. Second, this estimate captures only direct emissions from the Project; downstream emissions due to combustion will increase the Project’s climate harms. Finally, some academics believe the Working Group undervalued the Social Cost of Carbon. See, e.g., Robert S. Pindyck, Comments on Proposed Rule and Regulatory Impact Analysis 2–4 (Nov. 6, 2017), available at https://www.regulations.gov/contentStreamer?documentId=BLM-2017-0002-
to wreak billions of dollars in climate harm over the Project’s at-least 20 years of operation, FEIS Vol. I at 1-8 n.5 (describing Project’s minimum life and duration of proposed lease).

B. Monetizing Climate Damages Fulfills FERC’s Duties Under NEPA and the NGA, While Volumetric Estimates of Emissions Alone Do Not

Notwithstanding the feasibility of using the Social Cost of Carbon, FERC claims that this tool “is not appropriate in project-level NEPA review and cannot meaningfully inform the Commission’s decisions on natural gas infrastructure projects under the NGA.” Rehearing Order at P 104. But FERC inaccurately minimizes its duties under both statutes.

“[T]he key requirement of NEPA,” the U.S. Supreme Court has ruled, is to “consider and disclose the actual environmental effects in a manner that … brings those effects to bear on decisions to take particular actions that significantly affect the environment.” Balt. Gas & Elec. Co. v. NRDC, 462 U.S. 87, 96 (1983) (emphasis added). NEPA requires agencies to assess “effects and their significance,” 40 C.F.R. § 1502.16, which “requires consideration of both context and intensity,” id. § 1508.27, of the “ecological . . . , economic, social, or health” impacts caused by the agency’s actions, id. § 1508.8. As this Court has held, merely listing the quantity

16107&attachmentNumber=1&contentType=pdf (noting that this is not a reason to refuse to monetize climate damages at all).
of emissions is insufficient if the agency “does not reveal the meaning of those impacts in terms of human health or other environmental values.” *NRDC v. NRC*, 685 F.2d 459, 486 (D.C. Cir. 1982), *rev’d sub nom. on other grounds, Balt. Gas & Elec. Co.*, 462 U.S. at 106–07. “[I]t is not releases of [pollution] that Congress wanted disclosed; it is the effects, or environmental significance, of those releases.” *Id.* at 487. As detailed above, the Social Cost of Carbon provides an effective tool for measuring the “effects” and “significance” of greenhouse gas emissions.

Without a proper NEPA analysis, moreover, FERC cannot make statutorily required determinations under the NGA. Section 3 of the NGA bars the Commission from approving the siting, construction, expansion, or operation of natural gas exporting facilities that “will not be consistent with the public interest,” 15 U.S.C. § 717b(a); see also *Sierra Club v. FERC*, 827 F.3d 36, 46 (D.C. Cir. 2016) (“Freeport”) (determining scope of authority delegated to FERC for approving gas export facilities). Section 7 likewise permits FERC to approve the construction of natural gas facilities only if the project is “required by the present or future public convenience and necessity.” 15 U.S.C. § 717f(e). Both determinations require FERC to adequately consider a project’s environmental impacts, including climate consequences. *See Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017) (“Sabal Trail”) (explaining that “FERC could deny a pipeline certificate [under Section 7 if] the pipeline would be too harmful to the environment”); *Freeport*, 827
F.3d at 46 (recognizing that FERC must assess “the … environmental effects of authorizing” liquified natural gas facilities under Section 3). Without any meaningful assessment of the Project’s climate impacts—which the Social Cost of Carbon facilitates—FERC cannot reasonably make these determinations.

Here, FERC identifies the volume of greenhouse gases released, FEIS Vol. 1 at 4-270 tbl.4-11.1-13, 4-275 tbl.4-11.1-16, 4-278 tbl.4.11.1-18, lists some broad categories of climate impacts like heat waves, stronger storms, and sea level rise, id. at 4-481,12 and vaguely concedes that the Project’s emissions would “contribute incrementally to future climate change impacts,” id. However, as the dissenting FERC commissioner properly recognized, “listing the volume of emissions alone is insufficient.” Certificate Order at P 10 (Glick, Comm’r, dissenting) (“Certificate Order Dissent”). Indeed, the Ninth Circuit explained in an analogous case that quantifying the acres of timber to be harvested does not constitute a “description of actual environmental effects” even when paired with a qualitative “list of environmental concerns such as air quality, water quality, and endangered species,”

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12 FERC’s account is cursory and notes only a few effects of climate change while omitting many others. For instance, FERC does not mention critical impacts such as property damages from extreme weather, increased demand for water and energy in the face of temperature extremes, and cardiovascular and respiratory mortality from heat-related illnesses. Compare FEIS at 4-481 with U.S. Global Change Research Program, *Fourth National Climate Assessment: Vol. II* 989–1023 (2018) (projecting key climate impacts to Southern Great Plains).
if the agency fails to assess “the degree that each factor will be impacted.” *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 995 (9th Cir. 2004).

Several courts have applied this principle to hold that an agency’s mere quantification of greenhouse gas emissions—without monetization of resulting impacts—is insufficient. Most notably, in *Center for Biological Diversity v. NHTSA*, the Ninth Circuit held that the Department of Transportation’s quantification of greenhouse gas emissions and general description of climate consequences failed to satisfy NEPA’s obligations because the agency did “not evaluate the ‘incremental impact’ that these emissions will have on climate change” or disclose “the actual environmental effects resulting from those emissions.” 538 F.3d at 1216 (quoting 40 C.F.R. § 1508.7). Several other courts have followed suit. *Mont. Envtl. Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1096–99 (D. Mont. 2017); *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1190 (D. Colo. 2014).

Whereas the Social Cost of Carbon tool has been lauded by courts for allowing a proper assessment of climate impacts, FERC’s attempt “[t]o provide context to the … [greenhouse gas] estimate” by comparing the Project’s annual emissions to national and regional inventories, Certificate Order at P 108, is insufficient. FERC trivializes the Project’s contribution to climate change by framing the emissions as, for example, 0.17 percent of the national inventory, *id*. In doing so, FERC misleads
the public into thinking the emissions may be unimportant. But the mere fact that a project’s emissions are a small fraction of the national inventory hardly means that they are insignificant. As a federal court recently explained, “[t]he global nature of climate change and greenhouse-gas emissions means that any single lease sale or [oil and gas] project likely will make up a negligible percent of state and nation-wide greenhouse gas emissions.” *WildEarth Guardians v. BLM*, No. 18-73, 2020 WL 2104760, at *11 (D. Mont. May 1, 2020). Yet even a seemingly “very small portion of a gargantuan source of … pollution” may “constitute[] a gargantuan source of … pollution on its own terms,” *Sw. Elec. Power Co. v. EPA*, 920 F.3d 999, 1032 (5th Cir. 2019) (internal quotation marks omitted), and so comparisons to a national total fail to meaningfully analyze significance.

Comparisons to a geographic area’s total greenhouse gas emissions are misleading for another reason as well: The Commission can arbitrarily change the denominator to shrink or expand a Project’s apparent significance. FERC itself has recognized that using regional comparisons “as a benchmark for significance … is problematic” because the same quantity of emissions may appear “widely different” simply by changing the denominator from a state to a regional inventory. See SMP Project Remand at P 28. Courts have accordingly rejected analyses that trivialize project emissions by comparing them to geographic inventories. *High Country*, 52 F. Supp. 3d at 1190 (rejecting as insufficient analysis that “quantif[ied] the amount
of emissions relative to state and national emissions”); Mont. Envtl. Info. Ctr., 274 F. Supp. 3d. at 1094 (similar). And here, in fact, FERC ultimately concedes that its comparisons to larger greenhouse gas totals can “not determine a project’s incremental physical impacts on the environment.” Rehearing Order at P 109.

Because FERC fails to apply any methodology “to determine the significance of the Project’s contribution to climate change” and claims an inability to do so, FEIS Vol. 1 at 4-482, Rehearing Order at P 108, the Commission throws its hands up and concludes that the Project is “environmentally acceptable” without further climate analysis, Rehearing Order at P 110. But the Commission has no basis for determining the Project to be “environmentally acceptable” if, by its own admission, it fails to apply any method to assess the Project’s climate impacts. See Certificate Order Dissent at P 2 (“Claiming that a project generally has no significant environmental impacts while at the same time refusing to assess the significance of the project’s impact on the most important environmental issue of our time is not reasoned decisionmaking.”). These contradictory statements encapsulate a key reason why agencies must do more than quantify emissions and describe generalized consequences of climate change: Nonmonetized effects are often irrationally treated as worthless. Richard L. Revesz, Quantifying Regulatory Benefits, 102 Cal. L. Rev. 1423, 1434–35, 1442 (2014). By proclaiming ignorance about the Project’s climate harms and nonetheless declaring the Project “environmentally acceptable,”
Rehearing Order at P 110, FERC effectively and irrationally assigns climate impacts “zero value,” *Ctr. for Biological Diversity*, 538 F.3d at 1200.

In short, FERC does not identify the Project’s actual effects on climate change or assess those effects’ intensity and significance. Its determination to approve the Project without meaningful analysis of climate impacts violates NEPA and the NGA.

C. FERC’s Objections to the Social Cost of Carbon Are Misguided

While FERC offers numerous reasons why it does not apply the Social Cost of Carbon, Rehearing Order at PP 100–08; *see also* FEIS Vol. III, pt. 3 at 23–24, none withstand scrutiny.

**Variation.** First, FERC stresses “significant variation” in the appropriate value of climate damages, alleging that “no consensus exists on the appropriate discount rate to use” in calculating the Social Cost of Carbon. Rehearing Order at P 104 (internal quotation marks and alterations omitted). But this criticism fails for multiple reasons. For one, the Working Group in fact provided a “central value” for the Social Cost of Carbon using a 3 percent discount rate, 2016 Technical Support Document at 4, and likewise, recent reports from the National Academies of Sciences and other sources make clear that a 3 percent discount rate or lower is appropriate, *see, e.g.*, NAS 2017 Report at 32–33. Accordingly, many other agencies have applied the “central value” in their regulatory analyses. *See, e.g.*, Bureau of Land Mgmt., Regulatory Impact Analysis for the Waste Prevention Rule 37–38
(2016) (“For purposes of this analysis, we used the values for methane using the estimate deemed to be central by the [Working Group].”).

In any event, even accepting that “there is a range” of Social Cost of Carbon estimates, this does not justify FERC’s failure to monetize emissions at all. Because “the value of carbon emissions reduction is certainly not zero,” agency actions assigning no value to such emissions have been struck down under NEPA. Ctr. for Biological Diversity, 538 F.3d at 1200, 1227. Indeed, “[r]egulators by nature work under conditions of serious uncertainty,” and “[t]he mere fact that the magnitude of [a regulatory cost] is uncertain is no justification for disregarding the effect entirely.” Pub. Citizen v. Fed. Motor Carrier Safety Admin., 374 F.3d 1209, 1219, 1221 (D.C. Cir. 2004) (emphasis omitted); see also 85 Fed. Reg. at 1477 (recent rule applying Social Cost of Carbon and recognizing that “some uncertainty” in estimate “does not relieve [agency] of its obligation to attempt to factor” climate impacts into its analysis). And notably, FERC uses ranges to assess other impacts from the Project—such as the Project’s noise impacts, FEIS Vol. I at ES-18, 5-22, dredging impacts, id. at 4-40, and cooling water discharges, id. at 4-44.13

13 While this Court upheld FERC’s 2014 rejection of the Social Cost of Carbon after FERC concluded that discount rate uncertainty made “the tool inadequately accurate,” EarthReports, Inc. v. FERC, 828 F.3d 949, 956 (D.C. Cir. 2016), the Court more recently declined to reaffirm that “those arguments are applicable” and ordered FERC to reassess whether its reasoning “still holds,” Sabal Trail, 867 F.3d
**Incremental Impact.** FERC next argues that the Social Cost of Carbon is useless because it “does not measure the actual incremental impacts of a project on the environment,” Rehearing Order at P 104, but as detailed above, this is exactly what the Social Cost of Carbon does. This protocol was specifically developed to assess the “incremental impacts” of emissions, as it uses integrated models to assess the physical impacts of emissions and then converts those physical impacts into a dollar-figure estimate. Indeed, FERC concedes in the FEIS that the Social Cost of Carbon “can be used to estimate incremental physical climate change impacts,” FEIS Vol. III, pt. 3 at 23, so its claim to the contrary in the Rehearing Order rings hollow. FERC’s reliance on a “factual premise that is flatly contradicted by the agency’s own record does not constitute reasoned administrative decision-making.” *Kansas City v. Dep’t of Hous. & Urban Dev.*, 923 F.2d 188, 194 (D.C. Cir. 1991).

**Significance.** FERC’s next excuse—that “there are no established criteria identifying the monetized values that are to be considered significant for NEPA reviews,” Rehearing Order at P 104—is equally unpersuasive. As an initial matter, the lack of bright-line criteria for establishing significance is not unique to climate impacts, as other environmental and economic impacts present similar line-drawing challenges and require judgments by the Commission. With respect to vegetation, at 1375. Yet here, FERC simply reaffirms its prior reasoning without grappling with any new developments or the arguments above.
wildlife, and wetlands, for instance, the Commission “quantif[ied] the amount of acres that will be temporarily impacted by construction and permanently impacted by operation,” and “[b]ased on this information … made a reasoned finding” about significance. Id. at P 107. The Social Cost of Carbon would likewise provide a “reasoned basis” for FERC to assess whether the Project “has a significant effect on climate change,” contrary to the Commission’s claim, id. at P 108, by informing a similar type of judgment.

Against this backdrop, the need to identify significant environmental consequences is actually a strong reason for FERC to monetize emissions using the Social Cost of Carbon. First, a key advantage of the Social Cost of Carbon is that it groups together the multitude of climate impacts and, consistent with NEPA regulations, enables FERC to cumulatively assess “the severity of impact” by encompassing such factors as effects on “public health” and the “degree … [of] effects on the quality of the human environment,” 40 C.F.R. § 1508.27(b). Second, the significance of monetized consequences can be more readily evaluated by an economic regulator such as FERC, compared to merely quantifying emissions and listing general effects of climate change. See Atlantic Coast Rehearing Order at 8 n.38 (LaFleur, Comm’r, dissenting) (describing areas where FERC develops methodologies and exercises judgment to arrive at significance thresholds, such as “just and reasonable [returns on equity]”). Because NEPA regulations require
agencies to assess significance in terms of context and intensity, 40 C.F.R. § 1508.27, the Social Cost of Carbon—by providing an easy-to-grasp measure of the context and intensity of climate consequences—is ideal for assessing significance.

Project-Level Reviews. FERC next suggests that while the Social Cost of Carbon “may be useful for … rulemakings … , it is not appropriate for estimating a specific project’s impacts or informing our analysis under NEPA,” Rehearing Order at P 104, but this is a distinction without a difference. Though the Working Group’s estimates were originally published to guide regulatory analyses, the product of its work—additional climate damages per ton of emissions—is the same whether the emissions result from regulations or projects. In a prior determination, accordingly, FERC recognized that the Social Cost of Carbon was “appropriately used” in project-level NEPA reviews by numerous other agencies. SMP Project Remand at P 37; see also id. at P 37 & n.77 (noting that other agencies “have been faulted” by courts for “fail[ing] to quantify [climate] costs” using the Social Cost of Carbon). FERC’s prior acknowledgement that the Social Cost of Carbon may be appropriate for project-level reviews was correct, and its current contrary claim is conclusory and lacks a reasonable basis.

Executive Order. Additionally, FERC emphasizes the fact that “Executive Order 13783 … disbanded the Interagency Working Group … and directed the withdrawal of all technical support documents and instructions regarding the
methodology,” Rehearing Order at P 104 (citing Exec. Order No. 13,783 § 5(b), 82 Fed. Reg. 16,093 (Mar. 28, 2017)) ("E.O. 13,783"), but that too provides scant reason for failing to apply the Social Cost of Carbon to assess the Project’s climate impacts. Because FERC is an independent agency, it is unclear that it is in any way bound by this Executive Order. See E.O. 13,783 § 1(c) (applying order to “executive departments and agencies”). In any event, Executive Order 13,783 also instructs agencies to use the “best available science and economics” to “monetiz[e] the value of changes in greenhouse gas emissions,” id. § 5(a), (c), and the Working Group’s methodology and central estimate continue to be endorsed as the best estimates available, see, e.g., 85 Fed. Reg. at 1480 (continuing to use the Working Group’s estimates after Executive Order 13,783). Thus, even without a federally uniform estimate, FERC must still monetize climate damages consistent with the best available science. See Ctr. for Biological Diversity, 538 F.3d at 1198–203 (requiring agency to monetize greenhouse gas emissions prior to development of Working Group’s estimates). Finally, regardless of the contents of the Executive Order, an Executive Order cannot obviate the requirements NEPA places on agencies.

Agency Scope. In its response to Policy Integrity’s regulatory comments, FEIS Vol. III, pt. 3 at 23–24, FERC offers several additional justifications for failing to apply the Social Cost of Carbon, yet those are similarly unavailing. First, FERC claims that the tool is inappropriate because the Commission’s “responsibilities” are
insufficiently “tied … to fossil fuel production or consumption,” id. at 23, but this is nonsense. Greenhouse gases cause the same climate impacts regardless of an agency’s mandate or a project’s purpose, and this Court has unmistakably held that FERC must consider environmental harms as part of its determination of public convenience and necessity—including from greenhouse gas emissions, *Sabal Trail*, 867 F.3d at 1371–75. Moreover, FERC’s argument cannot be squared with its prior admission that use of the Social Cost of Carbon is appropriate for regulatory actions that “directly control whether … [greenhouse gas] emissions occur,” SMP Project Remand at P 37. Per FERC’s analysis here, the Project is directly responsible for greenhouse gas emissions—more than nine million metric tons per year, Certificate Order at P 108—and so, by FERC’s own prior logic, “it follows that” the Commission should “have chosen to use the Social Cost of Carbon tool to inform [its] decision[],” SMP Project Remand at P 37.

**Cost-Benefit Analysis.** Lastly, FERC suggests that it could not monetize climate costs using the Social Cost of Carbon without conducting a full cost-benefit analysis that is not currently possible due to technical limitations, FEIS Vol. III, pt. 3 at 23–24, but this is incorrect. The fact that FERC cannot monetize some effects does not mean that it can neglect monetizing other effects for which methodologies are readily available. *See High Country*, 52 F. Supp. 3d at 1191 (requiring monetization of climate impacts “[e]ven though NEPA does not require a cost-
benefit analysis”). Indeed, NEPA regulations provide that when there are “important qualitative considerations,” the agency should not rely exclusively on a “monetary cost-benefit analysis” but rather should present relevant monetized impacts alongside unquantified effects. 40 C.F.R. § 1502.23. Echoing this guidance, FERC routinely evaluates the relative importance of monetized benefits, weighing them against qualitative impacts. See Atlantic Coast Rehearing Order at 8 n.38 (LaFleur, Comm’r, dissenting) (“Many of the core areas of the Commission’s work have required the development of analytical frameworks, often a combination of quantitative measurements and qualitative assessments.”). Here, in fact, FERC monetizes some impacts of the Project—such as projected tax revenues, FEIS Vol. I at ES-11—and assesses those values in relation to other unquantified impacts. There is no reason it could not do the same with climate impacts.

All told, FERC offers no rational argument against using the Social Cost of Carbon. The Project’s climate costs should be monetized to fulfill FERC’s legal requirements to meaningfully assess climate impacts. Consequently, FERC’s failure to use the Social Cost of Carbon is unlawful.

D. FERC Arbitrarily Fails to Use an Available Tool to Monetize Climate Costs While Monetizing Project Benefits

While FERC’s failure to meaningfully evaluate climate impacts is unlawful by itself, the Commission compounds its error by simultaneously quantifying and monetizing beneficial economic impacts. As courts have explained, an agency’s
“decision not to monetize the benefit of carbon emissions reduction[s]” is particularly problematic when the agency monetizes other impacts, *Ctr. for Biological Diversity*, 538 F.3d at 1203, as this “inconsistently and opportunistically frame[s] the [action’s] costs and benefits,” *Bus. Roundtable*, 647 F.3d at 1148–49.

In this case, FERC monetizes many of the Project’s economic benefits such as direct expenditures, property tax revenues, and total economic impact, providing precise dollar figures for these impacts and concluding that “[t]hese expenditures and taxes would result in a moderate, permanent, and positive impact on the local economy.” FEIS Vol. I at ES-11. FERC explicitly considers these “economic benefits,” *id.* at 4-237, such as benefits to “employment” and “property values,” before concluding that the Project would not “result in disproportionately high or adverse environmental and human health impacts,” Certificate Order at P 98. In making this comparison, however, FERC “put[s] a thumb on the scale,” *Ctr. for Biological Diversity*, 538 F.3d at 1198, by monetizing many of the Project’s beneficial economic impacts without doing the same for climate costs. As numerous additional courts have held, this selective monetization of economic benefits but not climate costs violates NEPA.\(^{14}\)

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\(^{14}\) In *High Country*, for instance, the court found that it was “arbitrary and capricious to quantify the benefits of the lease modifications and then explain that a similar analysis of the costs was impossible when such an analysis was in fact possible.” 52 F. Supp. 3d at 1191. And in *Montana Environmental Information*
There is no rational reason for FERC to monetize the Project’s economic benefits but not its climate costs. Employment and payroll impacts, for example, could instead be presented as a miniscule percentage of nationwide employment figures or qualitatively as general effects on sectoral labor markets—akin to how FERC treated climate costs—yet FERC instead uses monetized payroll projections to help the public and decisionmakers understand the nature and degree of this effect, FEIS Vol. I at 4-212 to -213. The Social Cost of Carbon would have provided similar context to enable FERC to assess the significance of the Project’s climate costs.

In sum, FERC’s monetization of the Project’s economic benefits and steadfast refusal to do the same with climate costs present a lopsided picture at odds with reasoned decisionmaking. See also Pet’r Br. 55. The Commission’s conclusions finding the Project “environmentally acceptable,” Rehearing Order at P 110, and “required by the public convenience and necessity,” id. at P 10, are therefore irrational and arbitrary.

Center, the court found the same. 274 F. Supp. 3d at 1094–99. In both cases, the courts reached these conclusions notwithstanding the agencies’ justifications for rejecting the Social Cost of Carbon. High Country, 52 F. Supp. 3d at 1192, 1192 n.4; Mont. Envtl. Info. Ctr., 274 F. Supp. 3d at 1094–96 (dismissing arguments that Social Cost of Carbon can be applied only in rulemakings and that NEPA does not require cost-benefit analysis).
II. FERC’s Determination that the Project’s Ozone Effects Would Not Significantly Affect Health Is Arbitrary

FERC’s failures go beyond its climate conclusions: For instance, the Commission’s finding that the Project’s substantial ozone emissions “would not have a significant adverse impact on human health,” Rehearing Order at P 60, is also incorrect. Pet’r Br. 37–42. In drawing this conclusion, FERC appears to assume that any ozone emissions up until the point that atmospheric ozone levels exceed National Ambient Air Quality Standards (“NAAQS”) carry no risk. See Rehearing Order at P 60 (noting that FERC “relied on NAAQS thresholds to assess health impacts”). But expert consensus and regulatory precedent prove otherwise.


Obama have all noted that there is no threshold below which ozone exposure produces no adverse health effects. See Castle & Revesz, supra, at 1392–94. For example, the Environmental Protection Agency under George W. Bush stated that “ozone is a non-threshold pollutant.” EPA, Final Ozone NAAQS Regulatory Impact Analysis 6-30 (2008).

Contrary to this consensus, however, the Department unjustifiably and without explanation “relied on NAAQS thresholds to assess health impacts.” Rehearing Order at P 60. Because this premise “runs counter to the evidence” and is incorrect, Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983), it provides another basis to vacate the Certificate Order.
CONCLUSION

For the foregoing reasons, this Court should vacate and remand the Certificate Order as arbitrary and capricious.

Dated: June 17, 2020

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CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 29(a)(4)(G) and Fed. R. App. P. 32(g)(1), counsel hereby certifies that this brief complies with the type-volume limitations of Fed. R. App. P. 29(a)(5) because it contains 6,476 words (as counted by counsel’s word processing system) excluding those portions exempted by Fed. R. App. P. 32(f) and D.C. Cir. R. 32(e)(1), which is not more than half the maximum length of Petitioners’ principal brief under the rules.

Counsel further certifies that this brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface in a 14-point Times New Roman font.

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I hereby certify that on this 17th day of June 2020, a true and correct copy of the foregoing Brief of the Institute for Policy Integrity at New York University School of Law as *Amicus Curiae* in Support of Petitioners was filed with the Clerk of the United States Court of Appeals for the District of Columbia Circuit via the Court’s CM/ECF system. Counsel for all parties are registered CM/ECF users and will be served by the appellate CM/ECF system.

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