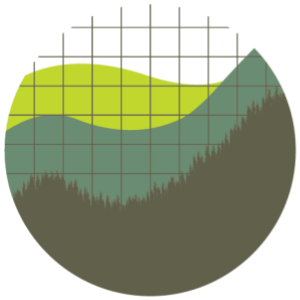

Institute *for*
Policy Integrity
NEW YORK UNIVERSITY SCHOOL OF LAW

June 22, 2020

To: Office of Energy Projects, Federal Energy Regulatory Commission, Department of Energy

Subject: Failure to Monetize Greenhouse Gas Emissions in Environmental Assessment for the Middlesex Extension Project (Docket No. CP20-30-000) (May 2020)

The Institute for Policy Integrity at New York University School of Law ("Policy Integrity")[1] respectfully submits comments on the Federal Energy Regulatory Commission's ("FERC") Environmental Assessment for the Middlesex Extension Project ("Environmental Assessment").[2] Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity regularly submits comments to federal agencies on the social cost of greenhouse gases and assessments under the National Environmental Policy Act ("NEPA") and the Natural Gas Act ("NGA").

In the Environmental Assessment, FERC projects that the Middlesex Extension Project—which calls for the construction and operation of natural gas pipeline facilities in Middlesex County, New Jersey—will allow for the transportation of 264 million cubic feet per day of natural gas to the Woodbridge Energy Center.[3] The combustion of this volume of natural gas would result in 5.29 million metric tons of downstream emissions in carbon-dioxide equivalence per year, which FERC fails to disclose.[4] This is a large amount of emissions, which dwarfs the annual construction emissions of approximately 24 thousand metric tons that FERC *does* disclose,[5] that will produce substantial climate-related damages such as sea-level rise, greater incidence of coastal storms and extreme weather events, and human health impacts and mortality from heat-related illnesses. While NEPA and the NGA require FERC to disclose and assess the significance of the contributions of its actions to such environmental impacts—and an available

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1 This document does not purport to represent the views, if any, of New York University School of Law.

2 FED. ENERGY REG. COMM'N, MIDDLESEX EXTENSION PROJECT ENVTL. ASSESSMENT (Docket No. CP20-30-000) (May 2020) [hereinafter "EA"].

3 *Id.* at 8.

4 The proposed pipeline would provide 264 million cubic feet per day of natural gas, *id.*, which equals 14,494 tons of carbon dioxide equivalent emissions daily (*see* EPA Greenhouse Gases Equivalencies Calculator, *available at*: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator). 14,494 * 365 days in a year = 5,290,310 metric tons of carbon dioxide emissions annually. Note that these calculations do not endorse FERC's estimates of natural gas transportation.

5 EA at 76.

metric, the social cost of greenhouse gases, allows the agency to do just that—FERC fails to estimate such actual, real-world climate impacts. Yet, as the social cost metrics reveal, approval of the proposed action would result in over $300 million in annual climate costs from downstream emissions.[6]

When a project has climate consequences that must be assessed under NEPA, quantifying the downstream greenhouse gas emissions and monetizing the climate damages from those emissions—both of which FERC fails to do here—fulfill an agency's legal obligations in ways that quantification of natural gas capacity or disclosure of minimal construction emissions does not. NEPA requires "hard look" consideration of beneficial and adverse effects of each alternative option for major federal government actions. The U.S. Supreme Court has called the disclosure of impacts the "key requirement of NEPA," and held that agencies must "consider and disclose the *actual environmental effects*" of a proposed project in a way that "brings those effects to bear on [the agency's] decisions."[7] The "impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires," and it is arbitrary and capricious to fail to "provide the necessary contextual information about the[se] cumulative and incremental environmental impacts."[8] Pursuant to this mandate, FERC must whenever possible "give[] a quantitative estimate of the downstream greenhouse emissions that will result from burning the natural gas that [a] pipeline[] will transport."[9] By failing to quantify and monetize the project's downstream emissions—likely one of its most significant environmental effects—FERC presents an incomplete and insufficient accounting of the project's effects on climate change.

While FERC must quantify the downstream greenhouse gas emissions from the project, quantification alone is not sufficient to fulfill its obligations under NEPA and the NGA. The tons of greenhouse gases emitted by a project are not the "actual environmental effects" that must be assessed under NEPA. Rather, the actual effects are the incremental climate impacts caused by those emissions, including property lost or damaged by sea-level rise, coastal storms, flooding, and other extreme weather events, and human health impacts including mortality from heat-

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[6] The 2016 Interagency Working Group's central estimate of the social cost of carbon for year 2025 emissions is $46 in 2007$; adjusted for inflation, that equals approximately $57 in 2019$. 5.29 million tons of CO2e* $57 = $301.53 million. In a proper cost-benefit analysis, that calculation of costs from year 2025 emissions would be discounted back to present value.

[7] *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 96 (1983) (emphasis added); *see also* 40 C.F.R. § 1508.8(b) (requiring assessment of the "ecological," "economic," "social," and "health" "*effects*") (emphasis added).

[8] *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008); *see also id*. ("[T]he fact that climate change is largely a global phenomenon that includes actions that are outside of [the agency's] control . . . does not release the agency from the duty of assessing the effects of *its* actions on global warming within the context of other actions that also affect global warming."); *Border Power Plant Working Grp. v. U.S. Dep't of Energy*, 260 F. Supp. 2d 997, 1028–29 (S.D. Cal. 2003) (failure to disclose project's indirect carbon dioxide emissions violates NEPA).

[9] *Sierra Club v. Fed. Energy Regulatory Comm'n*, 867 F.3d 1357, 1374 (D.C. Cir. 2017) ("*Sabal Trail*"); *see also Birckhead v. Fed. Energy Regulatory Comm'n*, 925 F.3d 510, 520 (D.C. Cir. 2019) (critiquing Commission's "less-than-dogged efforts to obtain the information it says it would need to determine that downstream greenhouse-gas emissions qualify as a reasonably foreseeable indirect effect of" a pipeline project). In the event that FERC is unable to quantify downstream emissions, it must "explain[] … specifically why it could not have done so." *Sabal Trail*, 867 F.3d at 1374. Here, however, it provides no explanation whatsoever.

related illnesses and changing disease vectors like malaria and dengue fever.[10] Even in combination with a general, qualitative discussion of climate change, simply quantifying emissions is not enough. By calculating only the tons of greenhouse gases emitted, an agency fails to meaningfully assess the actual incremental impacts to property, human health, productivity, and so forth.[11] To provide an analogous example, just quantifying the acres of timber to be harvested or the miles of road to be constructed 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," when the agency fails to assess "the degree that each factor will be impacted."[12] Moreover, as noted above, by quantifying only construction emissions but not downstream emissions, FERC further obscures the true severity of the proposed project's impact on climate change.

By monetizing climate damages from all emissions (including downstream emissions) using the social cost of greenhouse gas metrics, FERC can satisfy the legal obligations and statutory goals of NEPA to assess the incremental and actual effects bearing on the public interest. The social cost of greenhouse gases methodology calculates how the emission of an additional unit of greenhouse gases affects atmospheric greenhouse concentrations, how that change in atmospheric concentrations changes temperature, and how that change in temperature incrementally contributes to the above list of economic damages.[13] The social cost of greenhouse gases tool therefore captures the factors that actually affect public welfare and assesses the degree of impact to each factor, in ways that just estimating the volume of emissions cannot. In fact, a number of agencies have used the social cost of greenhouse gases to assess a project's climate impacts under NEPA.[14] By focusing only on volume estimates of potential natural gas transported in this instance, FERC falls far short of its legal obligations.

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[10] For a more complete discussion of actual climate effects, including air quality mortality, extreme temperature mortality, lost labor productivity, harmful algal blooms, spread of West Nile virus, damage to roads and other infrastructure, effects on urban drainage, damage to coastal property, electricity demand and supply effects, water supply and quality effects, inland flooding, lost winter recreation, effects on agriculture and fish, lost ecosystem services from coral reefs, and wildfires, *see* EPA, *Multi-Model Framework for Quantitative Sectoral Impacts Analysis: A Technical Report for the Fourth National Climate Assessment* (2017); U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment* (2017); EPA, *Climate Change in the United States: Benefits of Global Action* (2015); Union of Concerned Scientists, *Underwater: Rising Seas, Chronic Floods, and the Implications for U.S. Coastal Real Estate* (2018).

[11] *See supra* note 10.; *High Country Conservation Advocates v. United States Forest Serv.*, 52 F. Supp. 3d 1174, 1190 (D. Colo. 2014) ("Beyond quantifying the amount of emissions relative to state and national emissions and giving general discussion to the impacts of global climate change, [the agencies] did not discuss the impacts caused by these emissions."); *Mont. Envtl. Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1096–99 (D. Mont. 2017) (rejecting the argument that the agency "reasonably considered the impact of greenhouse gas emissions by quantifying the emissions which would be released if the [coal] mine expansion is approved, and comparing that amount to the net emissions of the United States").

[12] *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 995 (9th Cir. 2004) ("A calculation of the total number of acres to be harvested in the watershed is . . . not a sufficient description of the actual environmental effects that can be expected from logging those acres.").

[13] Interagency Working Group on the Social Cost of Carbon, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis* 5 (2010).

[14] *See e.g.*, BUREAU OF OCEAN ENERGY MGMT., FINAL ENVIRONMENTAL IMPACT STATEMENT OF COOK INLET PLANNING AREA OIL AND GAS LEASE SALE 244 (BOEM 2016-069) (Dec. 23, 2016); *see also* The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, 85 Fed. Reg. 24,174 (Apr. 30, 2020).

FERC's failure to quantify the proposed project's total greenhouse gas emissions and monetize the social cost of those emissions also violates the NGA. The NGA authorizes FERC to approve a natural-gas pipeline only if it satisfies the "public convenience and necessity" standard.[15] Such an assessment requires more than a "passing reference to relevant factors."[16] Yet FERC violates this requirement by simply quantifying construction emissions resulting from the proposed pipeline expansion without assessing downstream emissions or the significance of the project's total emissions on the "public convenience," as the NGA requires.[17] Given FERC's broad mandate to assess whether the proposed action is in the public interest, the agency's failure to meaningfully "consider whether the costs of its decision outweighed the benefits," by using readily-available tools to actually assess the project's substantial climate costs, violates the NGA.[18]

Policy Integrity hereby attaches its October 2019 comments on FERC's Draft Environmental Impact Statement for the Alaska LNG Project, submitted jointly with six other groups. Policy Integrity also attaches its 2019 report titled "Pipeline Approvals and Greenhouse Gas Emissions," which further explains FERC's legal obligations to assess climate-related impacts in pipeline approvals. FERC should consider all relevant arguments expressed in the attached documents to be comments made on the Environmental Assessment as well. As these documents further explain, and as detailed above, FERC will continue to violate NEPA and the NGA unless it uses the social cost of greenhouse gases to assess the climate-related impacts of the proposed action, including from downstream emissions.

Sincerely,

Iliana Paul, Policy Analyst
Max Sarinsky, Attorney
Jason A. Schwartz, Legal Director

Attached:

Joint Comments on the Failure to Use the Social Cost of Greenhouse Gases in the Alaska LNG Project Draft Environmental Impact Statement (Docket No. CP17-178-000)

Jayni Hein et al., Pipeline Approvals and Greenhouse Gas Emissions, Institute for Policy Integrity Report (2019)

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[15] 15 U.S.C. § 717(f)(c). FERC recognizes that it is evaluating the proposed project under this statutory provision. *See* EA at 22.

[16] *Mo. PSC v. FERC*, 234 F.3d 36, 41 (D.C. Cir. 2000).

[17] *See, e.g.*, *Sabal Trail*, 867 F.3d at 1374 (vacating Commission's determination as arbitrary and capricious after FERC failed to quantify or assess the significance of downstream emissions).

[18] *See Michigan v. EPA*, 135 S. Ct. 2699, 2706 (2015) (finding that agency acted arbitrarily and capriciously by failing to consider costs under a statute with a similarly broad mandate requiring agency to assess whether the contemplated action was "appropriate and necessary").